

97-84102-13

U.S. Bureau of Foreign
and Domestic Commerce

Foreign trade opportunity
manual for guidance...

Washington

1930

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Box 283 U.S. Bureau of foreign and domestic commerce.
...Foreign trade opportunity manual, for guidance of officers in the foreign service of the Department of commerce and the Department of state: Washington, U.S. Govt.print.off., 1930.
iv, 67 p. 23cm.

At head of title: U.S. Department of commerce...
Bureau of foreign and domestic commerce...

52430

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TECHNICAL MICROFORM DATA

FILM SIZE: 35mm

REDUCTION RATIO: 10:1

IMAGE PLACEMENT: IA ☒ IIA IB IIB

DATE FILMED: 5/29/97

INITIALS: TLM

TRACKING # : 24233

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FOREIGN TRADE OPPORTUNITY MANUAL

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Box 283

U. S. DEPARTMENT OF COMMERCE
BUREAU OF FOREIGN AND DOMESTIC COMMERCE

U. S. DEPARTMENT OF COMMERCE

R. P. LAMONT, Secretary

BUREAU OF FOREIGN AND DOMESTIC COMMERCE

WILLIAM L. COOPER, Director

FOREIGN TRADE OPPORTUNITY MANUAL

FOR GUIDANCE OF OFFICERS IN THE FOREIGN SERVICE OF
THE DEPARTMENT OF COMMERCE AND THE
DEPARTMENT OF STATE



UNITED STATES
GOVERNMENT PRINTING OFFICE
WASHINGTON : 1930

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INTRODUCTION

This manual is a compilation in brief and concise form of certain basic points as a guide to the foreign field men of the State and Commerce Departments in gathering data for foreign trade opportunities submitted to this bureau for publication to American exporters.

Each of the divisions in the bureau which have to do with the approving of trade opportunities received from the field has contributed to the manual by indicating what is required in the way of information to make trade opportunities of greater service to American exporters.

A careful review of instructions heretofore sent to consular officers of the State Department and Commerce Department representatives has been made, and additional suggestions are embodied in this manual with the hope that foreign field men may have a useful guide in preparing data for foreign trade opportunities.

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FOREIGN TRADE OPPORTUNITY MANUAL

GENERAL INSTRUCTIONS

The term "Trade opportunity" is adopted for practical convenience, and is not intended to lessen by implication the importance of reporting other opportunities for the extension of American trade abroad which do not come within the meaning of this term. Reports of construction work, immediate and prospective, are desired as heretofore, and reports should be made, as occasion presents itself, on available supplies of foreign products needed by the various manufacturers in the United States. Furthermore, the man in the field should report any opportunity for the profitable investment of American capital abroad and also make known any actual or prospective shortage of any commodities which the United States might supply.

Trade Opportunity Form 476, provided for reporting trade opportunities from the field, should be reserved for reports of definite inquiries for American goods or agencies therefor, which constitute trade opportunities in the more or less limited sense in which the term is applied. The regular form of trade reports should be used in all other instances.

The foregoing statement is particularly applicable in the case of agency opportunities. It is of vital importance to our exporters that they do not enter blindly into agency contracts with foreign representatives already under contract to handle directly competitive lines. Hence it is necessary that agency opportunities submitted should contain the names of all firms, both American and foreign, for whom that particular agency applicant is, at the moment, acting as representative. It is suggested that the back of Form 476 be utilized for this purpose, except when the accompanying (or lately submitted) World Trade Directory report contains such information. Field men, however, should make absolutely certain that a list of all firms represented appears either in the World Trade Directory report or on Form 476.

REPORTS OF CONSTRUCTION WORK

Reports of construction work should be prepared in the form prescribed for reports in general and should be entitled "Construction work." The phrase "Trade opportunity" should not be used.

Reports of proposals invited for public and private construction work and for the furnishing of equipment, machinery, and supplies should be transmitted as promptly as possible. Each report should be limited to one project. It is important to state the exact address to which bids are to be submitted, manner of submission, amount of deposit (if any) required, time limit, language, whether or not local

representation is necessary and, if so, names of local firms willing to act as agents, and cable addresses. Where plans and specifications accompany the invitation to tender, a number of these documents should be forwarded.

In the case of large undertakings the names of successful bidders, whether American or not, should be promptly reported, together with information such as may enable American firms to obtain subcontracts or concessions.

Reports should also be promptly submitted regarding important projects for construction work, whether or not the main contracts are open to tender, in order that the exporters of such American products as elevators, heating apparatus, tower clocks, window casings, timber, lumber, hardware, etc., may be advised of opportunities for the sale of their commodities.

PROCEDURE OF HANDLING FOREIGN TRADE OPPORTUNITIES

All trade opportunities received by the bureau, originating from the field forces of the State and Commerce Departments, are checked by interested divisions in the bureau with the object of determining whether sufficient information is available as to the standing and responsibility of the inquirer and whether the items desired to be purchased are defined sufficiently so that the American exporter can intelligently pass quotations. All such trade opportunities are brought to the attention of American firms by publication in Commerce Reports, the official organ of the bureau, issued weekly; also through the news and trade press of the country.

Commerce Reports in each weekly issue lists foreign trade opportunities by commodities and serial number, indicating whether the opportunity is an actual purchase or agency opportunity and the city and country from which the opportunity originated. The news and trade press of the country, under the caption "What the world wants," lists them in a similar manner. This press service is protected by an advance-release caution which permits editors in all parts of the country to print the announcements on the same day. Trade papers select and print the trade opportunities which are of interest to their readers because of the industry covered, and newspapers make a selection based upon the trades or industries prominent in the area covered by each paper. A very wide distribution is possible through all these mediums.

No foreign trade opportunities are given restricted distribution by this bureau unless a committee set up for the purpose of passing on specific cases decides that confined distribution is expedient. More or less confidential information respecting the standing, general responsibility, and reputation of the inquiring firm, together with sources of credit information, is made available through the Washington office of the bureau, or its district and cooperative offices, to bona fide American firms which have been approved for listing on the bureau's Exporters' Index.

Firms using this service are requested, when making quotations or corresponding with foreign firms as the result of trade opportunities offered, to send copies of their correspondence to the American consuls, commercial attachés, or trade commissioners from whom the trade opportunities originated, information on that point being part

of the data supplied by the bureau. This is the general plan of the bureau, and any deviation from such rule is passed on by a committee set up in the bureau which considers each individual case on its merit.

Correspondence received direct from foreign firms by the bureau asking to be put in touch with American exporters is, with very few exceptions, referred to the consular officer, commercial attaché, or trade commissioner in proximity to the correspondent, so that full information may be developed as to the responsibility and standing of the inquirer and whether the object in asking for quotations is legitimate.

Advices are made weekly to the foreign field forces of trade opportunities which were published and the date of such publications, and any trade opportunities which for any reason have not been published are reported as well and full reasons stated for the disapproval of such publications.

USE OF CABLES

The use of cables for reporting trade opportunities and construction work is approved in cases where the prospective business seems to be of sufficient magnitude and the element of time is essential. Owing to the limited appropriations at the disposal of the bureau, however, it is necessary to exercise discrimination in selecting opportunities and projects for telegraphic report.

LOCAL DISTRIBUTION OF TRADE OPPORTUNITIES

1. Field representatives abroad, when preparing trade opportunities for the sale of American goods and in submitting data relative to bids and tenders for construction work and various other opportunities for participation in commercial and industrial enterprise abroad, are quite frequently at a loss to determine whether such trade opportunity should be brought to the attention of the locally represented American firm at the same time that the data are forwarded to the United States.

2. It is the opinion of the bureau that inquiries for specific American articles of a proprietary character may frequently, with advantage, be referred directly to the foreign representative of the American manufacturer concerned. It is also suggested that when the requests are very small and do not warrant presentation to the bureau in a regular trade opportunity form, they should be brought to the attention of suitable American firms represented abroad. The trade opportunity form should, as a general rule, be reserved for use in cases where there is a reasonable prospect for the purchase of American goods in such quantities as are customary in the wholesale trade in the United States.

3. American firms operating branch houses in foreign countries should not be placed in more advantageous positions than their possible competitors in the United States, and the bringing of trade opportunities to the attention of locally represented American firms at the time of mailing the opportunity data to the United States is, manifestly, disadvantageous to such of our exporters as must do their negotiating from the American side. Hence it is expected that a time allowance, necessary for dispatch to Washington plus an additional period of at least two weeks, be observed before release to foreign branch houses is made in order that both types of exporters be given

equal opportunity. The foregoing plan should, in every case, be observed except as outlined in paragraphs 2 and 4 of this section.

4. Foreign field men will be expected to exercise their judgment in ascertaining whether the urgency of the opportunity will permit its submission to American firms in the United States in time to offer reasonable prospect of successful competition with foreign bids and tenders. The foreign field man will, in appropriate instances, inform the foreign representative of American firms of the circumstances of the opportunity where the prompt submission of bids is paramount in importance for the obtaining of the order. However, when the trade opportunity is of sufficient magnitude and the element of time is essential, the foreign officers will avail themselves of the cable report and will not give undue advantage to the locally represented American firms. Any advantage given to locally represented American firms should be given only in cases where special circumstances require such action in order to offset foreign competition.

GENERAL SUGGESTIONS

In the preparation of a foreign trade opportunity it is highly essential that when received from the field the trade opportunity form should cover such details as are peculiarly inherent to the particular item on which inquiry is based. A mere statement that a particular item is desired, unaccompanied by sufficient explanatory matter such as would specifically cover the subject matter desired, often negates the inquiry completely; at least, to develop it, considerable correspondence must be resorted to and valuable time expended in attempting to ascertain such details as are requisite to an intelligent dissemination of the trade opportunities.

The information relative to the commodity wanted should be closely in line with the requirements outlined in the commodity section of this manual. The use of general terms should be avoided as much as possible because their use detracts from the value of the opportunity when put in the hands of the American trade. Avoid the use of registered trade names such as Vaseline (petroleum jelly), Duco (pyroxylin lacquer), Celluloid (pyroxylin plastic), Cellophane (transparent cellulose wrapping tissue), Shredded Wheat (shredded cereal breakfast food in biscuit form), etc.

The nature of the inquiry, type of quotation wanted, payment terms, and character of inquirer's business should be specifically stated in every case. The use of full descriptive data always makes the trade opportunity more effective and valuable to the trade as a whole.

The presence of sufficient financial and trade references along with a brief bank report aids this bureau greatly in passing on the reliability of the foreign firm desiring to be placed in contact with American trade. The mere stating of the references is at times of little value because of the inaccessibility of such references. It is, therefore, suggested that whenever possible the officer in the field should get in contact with the financial and trade references in his locality and forward the result with the trade opportunity.

In the space set aside for comments, any information available as to the local reputation of the inquirer, whether or not the subject is known to make unfair claims or engage in any questionable business practices, is most desirable for the use of this bureau.

It is also important to ascertain and determine whether the inquirer has a reasonably bona fide intention of purchasing the quantities usual in the American export trade, and that his purpose in placing the opportunity is not merely to obtain competitors' prices or such information as would be used against the interest of American trade.

IMPORTANCE OF TIME ELEMENT

In the preparation of trade opportunities the field men should at all times keep in mind the fact that anything done to hasten the dissemination of the trade opportunity adds to its value. It is to be noted that the time which elapses in transmittal and the time for correspondence to the field for more data very often renders the trade opportunity of very little effect. It is, therefore, important that everything necessary for its proper consideration be included in the trade opportunity form. The close adherence to this suggestion will, in the opinion of the bureau, avoid further correspondence and delay and add to the effectiveness of the trade opportunity.

WORLD TRADE DIRECTORY REPORT

In every instance it is necessary that a World Trade Directory report should accompany each trade opportunity, unless such World Directory report has been submitted within a reasonably recent time prior thereto. The information contained in the trade opportunity form may be sufficient for the approval of the trade opportunity, but it is, as a rule, insufficient to pass out to the American merchant who is interested in ascertaining the exact status of the foreign concern. The trade opportunity becomes more valuable when accompanied with complete data concerning the subject making the request for American contact.

FOLLOW-UP ON TRADE OPPORTUNITIES

While various commodity divisions of the bureau endeavor to follow up with their respective clients to see if published trade opportunities result in business connections, and will continue to do so, it is thought that a more effective follow-up is possible in the foreign field.

Inquiry made to the foreign merchant in whose interest the trade opportunity is published should determine whether the responses received by such merchant are of value or otherwise; and, if negative, the reason.

It is believed that there have been instances in the past where the American exporter has been careless in respect to quotations, and specific instances of this or other instances may be discovered by a follow-up in the field and, if reported to the bureau, can be pointed out to exporters here as reasons why their efforts to secure business failed.

There seem to be many reasons for believing that a follow-up in determining results in regard to trade opportunities will be more productive of results in the improving of the service if carried on by the men in the foreign field.

The bureau will continue to report trade opportunities as they are published by date, name, and origin and will be glad to act on any comments from the field forces.

AGRICULTURAL IMPLEMENTS

The term "Agricultural implements" includes over 300 items and is too broad to be used as a descriptive term. Items desired in this group should be enumerated and described in as much detail as possible. For example:

Plows and listers:

- Plows, hand.
- Plows, horse drawn.
- Plows, disk.
- Plows, tractor.
- Listers (middle busters), horse.
- Listers (middle busters), power.
- Subsoilers (deep tillage).

Other plows, parts, and listers:

- Harrows, rollers, and pulverizers:
- Harrows, spike-tooth, horse drawn.
- Harrows, spring-tooth, horse drawn.
- Harrows, disk, horse drawn.
- Harrows, disk, power.
- Land rollers.
- Check rowers and levelers.
- Soil pulverizers or cultipackers.
- Grubbing machines.
- Stubble diggers.
- Clod crushers.
- Stalk cutters.
- Other harrows, rollers, and pulverizers.

Planting and fertilizing machinery:

- Corn planters.
- Cotton planters.
- Potato planters.
- Peanut planters.
- Transplanters.
- Potato cutters (seed).
- Drills and seeders, horse and power.
- Combination seeders.
- Broadcast seeders.
- End-gate seeders.
- Beet drills.
- Fertilizer distributors.
- Endgate distributors.
- Lime spreaders.
- Manure spreaders.
- Straw spreaders.
- Other planting and fertilizing machinery.

Cultivators and weedeers:

- Cultivators, horse.
- Cultivators, power.
- Cultivators, disk.
- Cultivators, beet.
- Cultivators, special crop type.
- Weedeers.
- Quack-grass diggers.
- Celery hillers.
- Potato hillers.
- Cotton scrapers.
- Other cultivating machinery.

Harvesting machinery:

- Harvesters and binders, grain.
- Combines (reaper-threshers).
- Bean and pea harvesters.
- Corn harvesters.
- Sugar-cane harvesters.
- Beet harvesters.
- Corn pickers.
- Corn huskers.
- Corn snappers.
- Grain headers.
- Grain binders.
- Rice binders.
- Corn cutters and binders.
- Potato diggers.
- Potato pickers and baggers.
- Beet lifters.
- Cotton pickers.
- Cotton strippers.
- Grain shockers or stokers.
- Grain cradles.
- Other harvesting machinery.

Haying machinery:

- Mowers, except lawn.
- Hayrakes.
- Tedders.
- Hay loaders.
- Hay stackers.
- Windrowers and bunchers.
- Other haying machinery.

Machines for preparing crops for market or for use:

- Threshers, grain.
- Threshers, rice.
- Threshers, pea and bean.
- Threshers, peanut (or picker).
- Thresher feeders.
- Hullers, bean and pea.
- Hullers, alfalfa.
- Hullers, clover.
- Hullers, almond.
- Cleaners and graders, grain.
- Fanning mills.
- Bean and pea cleaners and polishers.
- Cottonseed cleaner (delinter).
- Corn shellers, hand.
- Corn shellers, power.
- Corn husker and shredders.
- Corn cleaner and graders.
- Corn driers.
- Grain driers.
- Smut treaters (smutters).
- Hay balers (presses), horse.
- Hay balers (presses), hand.

AGRICULTURAL IMPLEMENTS

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Machines for preparing crops for market or for use—Continued.

- Hay balers (presses), power.
- Hop balers.
- Cotton balers.
- Tobacco balers.
- Feed grinders and crushers.
- Farm gristmills.
- Hammer type mills.
- Ensilage cutters.
- Silo fillers.
- Fodder cutters.
- Poultry mills for shell and bone.
- Vegetable pulpers.
- Corn crushers.
- Root cutters.
- Potato sorters and graders.
- Weighers, loaders, and baggers.
- Fruit presses.
- Cider mills, hand.
- Cider mills, power.
- Wine presses.
- Other machines for preparing crops, etc.

Tractors:

- Tractors, wheel type.
- Tractors, wheel type, Diesel or semi-Diesel.
- Tractors, garden.
- Tractors, motor cultivators.
- Tractors, tracklaying.
- Tracklaying attachments to convert wheel tractors into crawler type.
- Tractor pumping attachments, portable.
- Tractor winches.
- Tractor trailers.
- Tractor snowplows.
- Other tractors and parts.

Vehicles:

- Carriages, buggies, and other pleasure vehicles, other than automobiles.
- Wagons and drays.
- Carts.
- Pushcarts and hand trucks.
- Logging and lumber wagons.
- Dump wagons.
- Commercial wagons.
- Dairy wagons.
- Lunch wagons.
- Hot-dog wagons.
- Wagon trailers.
- Hearses, horse drawn.
- Bobsleds.
- Street sprinklers, horse.
- Street sweepers, horse.
- Other vehicles and parts.

Barn equipment:

- Silos.
- Stalls and stanchions.
- Feed and litter carriers, overhead systems.
- Slings.
- Stock feeders.
- Stock waterers (hog troughs).
- Stock pens.

Barn equipment—Continued.

- Hog oilers.
- Hog and bull rings.
- Hog houses, knock down.
- Other barn equipment.
- Miscellaneous farm equipment:
- Beekeeping equipment.
- Dairy machinery and equipment.
- Cream separators, hand.
- Cream separators, power.
- Milking machines.
- Milk and cream testers.
- Milk clarifiers.
- Churns.
- Butter bowls.
- Butter workers.
- Pasteurizers.
- Farm fruit graders (tomato, apple, peach, potato, and onion).
- Farm elevators, portable.
- Cribes, corn and grain, portable.
- Engines, internal combustion (not over 10 horsepower).
- Engines for tractors.
- Lawnmowers, hand.
- Lawnmowers, power.
- Lightning rods.
- Poultry equipment.
- Incubators.
- Incubators, knock down.
- Incubators, electric.
- Brooders.
- Brooders, knock down.
- Poultry feeders.
- Poultry fountains.
- Chicken coops, metal.
- Chicken coops, wood.
- Chicken coops, knock down.
- Egg testers.
- Egg cases.
- Poultry nests.
- Other poultry equipment.
- Pumps, hand.
- Pumps, pitcher.
- Pumps, windmill.
- Pump cylinders.
- Pump jacks.
- Windmills.
- Windmills, electric.
- Windmill towers.
- Windmill tanks, wood.
- Windmill tanks, metal.
- Parts of windmills.
- Water systems, for farm and house.
- Spraying outfits for crops.
- Sprayers, hand (with tank, barrel, or knapsack).
- Sprayers, power.
- Dusters, hand.
- Dusters, power.
- Spray pumps.
- Other sprayers and insecticide equipment.
- Wheels, wood (except auto and car wheels).
- Wheels, metal (except auto and car wheels).

Miscellaneous farm equipment—Con.	Miscellaneous farm equipment—Con.
Wheelbarrows, wood.	Road scrapers (drag, etc.).
Wheelbarrows, metal.	Slip scrapers.
Parts of wheels (hubs, spokes, and and rims).	Fresno scrapers.
Neck yokes.	Scarifiers (farm use).
Eveners (singletrees).	Ditchers and graders (farm use).
Equalizers (doubletrees).	Sweeps, horse and power.
Axles and springs.	Stubble burners.
Poles and shafts.	Stump pullers.
Skins.	Saws, portable, small-engine driven.
Gears.	Tank heaters.
Bodies of vehicles (except auto trucks).	Insect exterminators (boll weevil and others).
Loaders (portable).	Other miscellaneous farm equipment.
Stone boats.	

Many times it is of utmost importance to be informed of the style, size, and purpose for which the implement is to be used and, if possible, whether the implement desired is to compete with other makes. Give trade name of implement and name of the maker.

A World Trade Directory report should accompany every trade opportunity submitted, unless such report has been submitted within a reasonably recent time.

AUTOMOTIVE PRODUCTS

When submitting a trade opportunity on any of the commodities listed below, it is desirable that the related particulars be furnished. Items desired in this group should be enumerated and described in detail, as follows:

Automobiles.—Number of cylinders, approximate horsepower, body types, drive equipment, price class, brakes, ignition, metric or United States recording instruments, type of wheels and tires, approximate gross weight, wheel base, over-all length and width, and number of forward speeds.

Garage and service equipment.—Detailed specifications, whether light or heavy duty, operating power.

Marine engines, gasoline (except Diesel).—Number of cylinders, whether 2 or 4 cycle, types and dimensions of boat to be fitted, price class, whether for use on fresh or salt water, horsepower, and gross weight.

Motor boats.—Style of boat, size, use, speed, price class, and gross weight.

Motor cycles.—Number of cylinders, approximate horsepower, with or without electrical equipment, whether stock model or special, with or without side car, ignition, price class, tires, maximum speed, gross weight, metric or United States recording instruments.

Trucks.—Number of cylinders, load capacity, approximate horsepower, price class, style of body, tires (solid or pneumatic and two or four rear tires), wheels, gross weight, recommended body allowance, ignition, drive equipment, metric or United States recording instruments, wheel base, over-all length and width, and number of forward speeds.

A World Trade Directory report should accompany every trade opportunity submitted unless such report has been submitted within a reasonably recent time.

AERONAUTIC PRODUCTS

When submitting trade opportunities for aeronautic products, give the following details:

Aircraft.—Style of plane, purpose, number of engines, horsepower, useful load, passenger capacity, maximum altitude, speed, landing speed and take-off, metric or United States gauges, recording instruments, and price class.

Parts and accessories for aircraft as well as miscellaneous aviation equipment.—Items in this group should be enumerated and described in as much detail as possible with specifications when available.

Aircraft engines.—Horsepower, whether radial or not, air cooled or water cooled, number of cylinders, and makes of aircraft on which engines are to be installed.

A World Trade Directory report should accompany every trade opportunity submitted unless such report has been submitted within a reasonably recent time.

CHEMICAL PRODUCTS

Indefinite commodity names, such as alcohols, fertilizers, alkalies, acids, paints, solvents, industrial chemicals, etc., are to be avoided, as they are commodity group names. Similarly, do not use the terms "chemicals for paper," "chemicals for leather," or "chemicals for textile manufacturing." All of the foregoing terms may, however, be used to supplement the specifications. It is preferable that lists of such commodities as are actually handled by the inquirer, or in which inquirer has evinced an interest, should be submitted rather than group names. A commodity, sometimes manufactured exclusively by but a few concerns, may have specific uses and, incidentally, consuming industries in the same class (such as the textile industry), even though engaged in making the same product, may have different processes and, therefore, use different chemicals. Details should not be omitted, particularly as to the quality specifications. Although it is not essential in the sale of chemical products, it should be stated whether a dealer inquiring for a line of chemicals, has a technical man in his employ. Note might also be made of the display and storage facilities accessible to the inquirer. Finally, it would be well to state the class of trade that inquirer caters to in general.

A World Trade Directory report should accompany every trade opportunity submitted unless such report has been submitted within a reasonably recent time.

ELECTRICAL GOODS

Electrical goods may be divided into general classes as:

1. Merchandising.
2. Industrial.

In the domestic market "merchandising lines" are generally conceded to be those handled by jobbers, while "industrial lines" are those sold direct by manufacturers. However, no trade opportunities of these general descriptions will be approved, because they will not produce results. There are generalities which are acceptable, as:

1. Electrical household appliances:
 - (a) Motor driven household appliances.
 - (b) Domestic heating and cooking devices.
2. Electrical hotel appliances.
3. Wiring supplies.
4. Lighting fixtures.
5. Radio apparatus.
6. Telephone equipment.

Such descriptions as power-plant equipment, generators, or electrical machinery are not acceptable, as manufacturers will not consider that the inquirer has definite merchandise in mind.

Trade opportunities should be confined to those inquiries where the inquiring firm fully expects to negotiate with some firm in this country. When firms are interested in prices, etc., in order to determine their interest, that fact should be communicated to the bureau.

For all current-consuming devices, the current characteristics should be given fully. It should be specified whether alternating or direct current, the frequency when alternating, and the voltage.

A general statement of commodities desired, such as "specialties," "novelties," or "latest patented articles," conveys no meaning and can not be intelligently interpreted to apply to articles of any particular group.

Used equipment.—Used and reconditioned equipment on the American market is generally unsuited for sale abroad, mainly because it is suited for alternating current, 60 cycles, 110 volts, the usual current in the United States.

Motors.—In addition to current characteristics, information on any special type of starter required by local regulations should be given. Motors of less than 1 horsepower are usually styled fractional-horsepower motors.

Radio.—An idea of price range should be specified when referring to radio receiving sets; also, whether battery-operated or electric sets are desired. If the latter, the kind of current should be given.

A World Trade Directory report should accompany every trade opportunity submitted unless such report has been submitted within a reasonably recent time.

FOODSTUFFS

There are about 350 different items classified under the general term "foodstuffs," and each item represents a separately organized trade.

CANNED AND DRIED FOODS

CANNED FRUITS AND VEGETABLES

Specifications should show the kind of fruits or vegetables wanted, the size of cans, number of cans to the case, and grade or quality desired. The grades in common use are fancy, choice, standard, seconds (or water), and pie. California fruit canning is standardized and for each fruit there is a definite strength or concentration of sirup used for each particular grade. Unless a standard pack is desired, specifications for sirup strength should be given.

DRIED FRUITS

Specifications should show the kind of fruit desired, the grade, and the form of packing. The usual grades are extra fancy, fancy, extra choice, choice, and standard. The standard packing is in cartons of 1 or 2 pounds, 25 and 50 pound boxes, and bags. Bags generally are used only for the lowest grade.

CANNED MILK

Specifications should show whether condensed, evaporated, or powdered milk is desired. Each of these may be made from full milk or from skimmed. Condensed milk is usually packed in 14-ounce tins, 48 to the case. It is also sold in bulk. Evaporated milk is packed in 6-ounce cans and 16-ounce cans, running 96 and 48 to the case, respectively. Powdered milk may be packed in any size package desired. For retail trade, 1-pound packages are the most common. Under the United States pure food and drugs act, evaporated milk must contain not less than 7.8 per cent milk fat, nor less than 25.5 per cent total milk solids, provided, however, that the sum of the percentages of milk fat and total solids be not less than 33.7 per cent. If milk of other composition is desired, it should be so specified. Sweetened condensed milk contains not less than 8 per cent fat and 28 per cent total milk solids.

CANNED FISH

Specifications should give the kind and grade or quality desired, together with the can sizes. Shrimp and oysters are usually packed in 5 and 8 ounce cans. Shrimp are packed either "wet" (with brine) or "dry." Sardines are packed in $\frac{1}{4}$, $\frac{1}{2}$, $\frac{3}{4}$, and 1 pound cans; they may be packed with cottonseed oil, peanut oil, or rarely with olive oil, or in tomato sauce or mustard. The number of cans per case varies from one hundred $\frac{1}{4}$ -pound to forty-eight 1-pound cans. Salmon is packed in $\frac{1}{2}$ -pound flat cans and 1-pound tall or flat cans, and ninety-six $\frac{1}{4}$ -pound cans or forty-eight 1-pound cans are packed to the case.

Specifications should give the kind of fish desired and method of packing, such as fresh, frozen, iced, dried, salted, smoked, and pickled. As the method of packing varies with the kind of fish and its treatment, specifications should cover this point.

GRAINS

WHEAT

There are five distinct classes of wheat grown and exported, as follows: Spring (similar to Canadian), durum, hard winter, soft winter, and Pacific white.

Each class is divided into subclasses, according to standards promulgated by the United States Department of Agriculture; that is, amber durum and red durum, dark northern spring and red spring, etc., and each subclass divided into grades; that is, Nos. 1, 2, 3, 4, etc.

WHEAT FLOUR

The United States is the largest producer and exporter of flour. Practically no flour is imported and no foreign flour is needed.

Five distinct types of wheat flour are exported from the United States:

- (a) Spring wheat flour; milled in Minneapolis, Buffalo, etc.
- (b) Hard winter wheat flour; Kansas City, St. Louis, and southwestern flours generally.
- (c) Soft winter flours; milled generally east of the Mississippi.
- (d) Pacific coast flour.
- (e) Durum semolina; used chiefly for macaroni and similar products; or farina, a product similar to semolina but made from spring wheat.

Of each of the first four types of flour, there are several grades exported: (a) Patents, the best grade, (b) straights, and (c) clears, the cheapest grade. The clear grades of spring wheat and of hard winter wheat which are exported are of two classes: First clear, the better class; and second clear, the poorer class and the lowest grade of all flours exported. A first clear made from durum wheat is also exported in large amounts.

Flour made from spring wheat and from hard winter wheat is generally best fit and adapted for bread making, because of the relatively high per cent of gluten. It can also be used to make macaroni, etc. Flour from soft winter wheat is low in gluten and is best adapted to biscuit, cracker, and pastry manufacture. Pacific flour varies widely, some being best adapted for bread and some for pastry.

Practically all flour produced in the United States is sold according to a brand name, and the manufacturers, as a rule, strive to maintain the brand uniform in quality, both in respect to composition and physical properties, as well as for its capacity to yield pastry of the same general character.

Although a large part of the flour exported from the United States is the product of comparatively few mills, there are several hundred brokers and mills that are shipping flour to foreign markets. Trade opportunities are always welcome, either for special orders or for agencies.

Where a trade opportunity covers flour, the kind and grade desired (see above description) should be clearly stated.

Kind of packages preferred should be given, the size of package, and character of container.

Flour is generally packed in containers of various sizes, depending upon the custom of the country. If possible, a small sample (1 or 2 ounces) of the kind and grade desired should accompany the trade opportunity as well as the local wholesale price (in United States currency equivalent) of such flour.

OTHER FLOURS

Export opportunities are desired for other flours, such as rye flour, buckwheat flour, and maize meal and flour.

Trade opportunities for these flours should be accompanied, if possible, by a small sample (1 or 2 ounces) of the kind and grade desired, and the local wholesale price of such flour should be stated in United States currency equivalent.

CORN

Trade opportunities submitted for corn should state specifically the grade and, when possible, information regarding the class of corn generally used by the prospective buyer, as well as the present local market price of the grade of corn required.

There are six grades known to American trade, Nos. 1, 2, 3, 4, 5, 6, also sample grade. Corn falls generally into three classes, yellow, white, and mixed (yellow and white), and is sold according to grades as per details shown in the following table:

	Minimum weight per bushel	Maximum allowance			
		Moisture	Foreign material	Damaged kernels	
				Total	Heat damaged
	Pounds	Per cent	Per cent	Per cent	Per cent
Grade 1.....	55	14.0	2	2	0.0
Grade 2.....	53	15.5	3	4	.1
Grade 3.....	51	17.5	4	6	.3
Grade 4.....	49	19.5	5	8	.5
Grade 5.....	47	21.5	6	10	1.0
Grade 6.....	44	23.0	7	15	3.0

Grades 1 to 5 must be cool and sweet; No. 6 shall be cool but may be musty or sour.

Sample grade does not come within the description of any of the grades shown by the table.

OATS

The grade of oats desired should be indicated on each trade opportunity, using the specifications employed in the United States. If possible, a statement indicating the kind of oats generally preferred in the inquirer's country and the prevailing wholesale price of the grade demanded should also be stated.

In the United States, grades are quoted by number and color. No. 3 white oats is the grade most commonly quoted. There are four grades, conforming to the specifications shown below, and a so-called "sample" grade, in addition.

	Weight per bushel	Sound oats, minimum	Maximum allowance		
			Heat damage	Foreign material	Wild oats
	<i>Pounds</i>	<i>Per cent</i>	<i>Per cent</i>	<i>Per cent</i>	<i>Per cent</i>
Grade 1.....	56	98	0.1	2.0	2.0
Grade 2.....	54	95	.3	2.0	2.0
Grade 3.....	52	90	1.0	3.0	5.0
Grade 4.....	49	80	6.0	5.0	10.0

Nos. 1, 2, and 3 shall be cool and sweet; No. 4 shall be cool but may be musty.

No. 1 shall be of good color; No. 2 slightly stained; No. 3 may be stained or slightly weathered; No. 4 may be weathered or badly stained.

These grades apply to either white, red, gray, black, or mixed oats.

"Bleached oats" have been in part or in whole subjected to bleaching agents. They are graded as though not bleached, but must be labeled "Bleached."

"Weevily oats" have been infested by insects injurious to stored grain. They are graded as though not weevily, but must be labeled "Weevily."

"Clipped oats" have had the ends removed by a clipper. They are, however, graded as not clipped.

Oats are an important export item in the foreign trade of the United States, and trade opportunities are in demand.

RYE

Trade opportunities submitted for rye should state specifically the grade required.

There are four grades known to American trade, Nos. 1, 2, 3, 4, also sample grade. The detail of these grades is specified on the following table:

	Minimum weight per bushel	Maximum allowance				
		Moisture	Damaged kernels		Foreign material	
			Total	Heat damaged	Total	Other than wheat
	<i>Pounds</i>	<i>Per cent</i>	<i>Per cent</i>	<i>Per cent</i>	<i>Per cent</i>	<i>Per cent</i>
Grade 1.....	56	13	2	0.1	2	1
Grade 2.....	54	14	4	.2	6	2
Grade 3.....	52	15	7	.5	10	4
Grade 4.....	49	16	15	3.0	10	6

Sample grade does not come within any of the grades mentioned in the above table.

BARLEY

When a trade opportunity covers barley, it would be advisable to state, if possible, whether it is to be used as a feed or for malting and whether eastern barley is desired or that grown on the Pacific

coast (western barley). It would also be helpful to know the prevailing market price of the grade desired and for what purpose it is to be used.

There are four classes of this grain, (1) white barley grown east of the Rockies, (2) white barley grown west of the Great Plains, (3) 2-rowed barley, grown west of the Great Plains, and (4) black barley.

Class 1 is grown chiefly in the Central States. It is adapted for malting, but is most commonly used as a feed. When malted it is particularly useful in the distillery, but is also occasionally used for beer making.

Class 2 is produced chiefly in California and is especially adapted for making malt used in brewing.

The lower grades, as well as the higher ones whose germinating capacity has been injured, are used for feed.

Malt.—Malt is generally of two kinds, that made from Pacific coast barley and that made from barley grown in the Central States. Each trade opportunity should indicate the kind preferred and the prevailing local wholesale price expressed in United States currency equivalent, and be accompanied by a small sample (1 ounce) if possible.

RICE

There are two general rice-growing regions, (a) the South and (b) the Pacific coast. The rice produced and exported from New Orleans is chiefly of the Blue Rose, or long, type. That which is grown in California is generally much shorter and rounder and is known as Japan rice.

Rice is exported according to grades—extra fancy and fancy—and according to type—Blue Rose or Japan. Broken rice and rice meal are also exported in large quantities.

Trade opportunities should designate the grade and type desired and be accompanied by a small sample (1 ounce) if possible. The local wholesale price of the particular kind of rice should also be given, expressed in the United States currency equivalent.

FARINA AND SEMOLINA, CORN GRITS OR HOMINY, PEARL BARLEY

Each trade opportunity should, when possible, be accompanied by a small sample (1 ounce) of the grade and type desired, together with a statement of the local wholesale price, expressed in United States currency.

BREAKFAST FOODS

Our foreign markets for breakfast foods are becoming more important each year.

Each trade opportunity should state the kind wanted, as, for example, oatmeal or rolled oats, puffed wheat or rice, shredded wheat, corn, rice, or wheat flakes, grape nuts, etc.; the kind or character of container; and the local wholesale price in United States currency, if possible, of similar breakfast foods.

DIABETIC AND INFANT FOODS

Diabetic foods are generally rich in gluten and contain no more than one-half as much carbohydrates as the normal food of the same class. Infant foods, on the other hand, are generally rich in carbohydrates which have been modified to a certain extent and made

more easily assimilable. Trade opportunities should be careful to describe as accurately as possible the product desired and the kind and size of package.

EDIBLE PASTES

Macaroni, spaghetti, noodles, etc., are dried pastes made of semolina, farro, flour from hard wheat, or from a blend of these raw products.

There are various shapes and styles of macaroni, etc. Trade opportunities should indicate the shape desired, the size of package, and the local wholesale price per pound in United States currency equivalent.

BISCUITS

Biscuits are of two general classes, (a) sweetened and (b) unsweetened.

Each trade opportunity should state the kind wanted, describing, if possible, the size, shape, and other characteristics; the kind of container required, whether tin or carton; and the local wholesale price, in American currency equivalent, of biscuits of similar quality. If biscuits made by favored foreign competitors are specially packed, it would be of help to receive samples of empty containers of the most popular brands.

FEEDS

The feeds exported from the United States are varied: Cottonseed meal and cake, linseed meal and cake, corn germ meal and cake, hominy feed from corn mills, gluten feed from starch mills, bran and shorts from flour mills, etc., besides prepared feeds for poultry, dairy, etc. Trade opportunities should state the kind desired and the size of containers preferred.

SEED, NURSERY STOCK, PLANTS, AND BULBS

The United States is on an import basis regarding fruit stock, rose stocks, and plants and bulbs, although it does export over 1,000,000 fruit stocks and cuttings and about 6,000,000 "all other nursery and greenhouse stock, plants, and bulbs." When a trade opportunity covers those subjects, the character of the seed or nursery stock, etc., should be given, as well as the character of packing required.

MEATS

In reporting a trade opportunity on meats, the following should be specified:

Kind: Beef, veal, pork, mutton, lamb, goat, or horse.

Condition: Fresh, chilled, frozen, pickled, or cured.

Grade: Prime, choice, good, medium, fair, common, culls, heavy (for spring lambs), culls, buck (for sheep), kid or aged (for goats). In the case of beef, specifications as to types of meat should be given; that is, whether steer, cow, bull, or heifer.

Cut: Shanks, loins, briskets, etc.

Weight.

Packing.

BARRELED BEEF

Barreled beef is made of navel ends, briskets, and rump butts.

There are five grades of family beef, all cut from navel ends. No. 1 is made from navel ends 40 pounds and up; No. 2 from navel ends 32

to 40 pounds average; No. 3 from navel ends 28 to 32 pounds average; No. 4 from navel ends 23 to 28 pounds average; and No. 5 from navel ends 15 to 23 pounds average. These navel ends for export shipments are generally cut into 5 pieces, 2 rip pieces and 3 flank pieces. All grades are packed in barrels, half barrels, and quarter barrels. In each package equal numbers of pieces are packed as cut.

BRISKET CORNED BEEF

Brisket corned beef consists of No. 1 fancy corned beef and a regular corned beef. The fancy brisket corned beef is made from No. 1 native steer briskets, while the regular is made from common cow briskets. The No. 1 fancy briskets will weigh between 12 and 18 pounds per piece and the regular briskets will average between 6 and 12 pounds. Packing is in barrels, half barrels, or quarter barrels.

RUMP CORNED BEEF

Rump corned beef is generally made in only one grade and from regular common rumps, weighing 4 pounds and up. These are packed in barrels, half barrels, or quarter barrels.

FANCY MEATS: BEEF

Frozen brains.—Packed 12 pairs to the crate, each brain weighing from $\frac{3}{4}$ to 1 pound. Pails weigh 5 and 10 pounds each.

Frozen bull fries.—Individually frozen and packed in 25, 50, and 100 pound boxes.

Whole hearts.—Can be separately frozen and packed in 25 and 50 pound boxes as desired by trade.

Frozen kidneys.—Individually frozen and wrapped, packed in 20-pound boxes.

Livers.—Individually frozen and packed in 50-pound boxes. Selected stock including all steer and cow livers of a bright color that are free from sores, boils, or spots, and weighing 9 pounds and over. Also, solid frozen 50-pound boxes, house-run stock.

Ox tails.—Frozen and packed in 50-pound boxes for domestic specifications or individually frozen and packed in burlap bags containing about 50 pounds net weight. Graded in three averages, as follows: Under 1 pound, 1 to $1\frac{1}{2}$ pounds average, and $1\frac{1}{2}$ pounds and up.

Sweetbreads.—Solid frozen and packed in 5-pound pails, 12 pails to the case, and individually frozen and wrapped in wax paper 7 ounces and up. Can be packed in 10, 25, or 50 pound boxes as desired by the trade.

Tripe.—H. C. Can be rolled and individually frozen and packed in any sized container desired by the trade. Also, cured in vinegar pickle and packed in tierces, barrels, half barrels, quarter barrels, and kits.

Cooked beef tripe is used in the manufacture of sausage, and is shipped to the trade solid frozen packed in 100-pound molds. However, it can be rolled and individually frozen and handled in the same manner as H. C. tripe. Also, a small quantity is sold in vinegar pickle.

FANCY MEATS: LAMB

Brains.—Frozen in 5-pound pails and packed 12 pails to the crate.
Fries.—Individually frozen and graded as No. 1, which consists of product running 4 to 6 pieces to the pound, and No. 2, running over 6 pieces to the pound. Can be packed in any size container desired by the trade.

Sheep livers.—Product sold in the United States is solid frozen, packed in 25 and 50 pound boxes. However, can be single frozen and packed in any size container desired by the trade.

Selected lamb livers.—This product consists of choice selected product, including nothing but livers of genuine lamb quality, of bright color and free from sores, boils, or any kind of mutilations, and packed solid frozen in 10 and 25 pound pails.

Plucks.—Pack, rosette style in 25 and 50 pound boxes.

Tongues.—Can be trimmed into long cuts or short cuts, scalded and skinned or unskinned and unskinned, and packed in any size container desired.

Sweetbreads.—Generally left in carcass, but if market warrants can be saved and packed in 5 or 10 pound pails.

FANCY MEATS: CALF

Brains.—Frozen in 5-pound pails, packed 12 pails to the crate.

Kidneys.—Frozen individually and graded fat on and fat off. Can be packed in any size container desired.

Veal livers.—Extra selected quality having a vealy appearance, and from milk-fed animals only, free from sores, spots, or mutilations, and packed in 10 and 25 pound pails, solid frozen.

Calf livers.—Livers obtained from hard-fed animals, darker in color than veal, packed in 10 and 25 pound pails solid frozen.

Sweetbreads.—Regular trimmed, frozen solid in 5-pound pails, packed 12 pails to the case. Also, individually frozen in pairs consisting of the heart and throat bread, and graded 6 to 8, 8 to 10, 10 to 12, 12 to 14, 14 to 16, and 16 ounces and up. These can be packed in any size container desired, and are generally sold on the per pair basis.

Tongues.—Trimmed as long cuts and short cuts and graded $\frac{1}{2}$ to 1, 1 to 2, and 2 to 3 pounds average, frozen in slabs and packed in boxes and bags.

Beef tongues.—The bulk of our export trade consists of short cuts graded as follows: $2\frac{1}{2}$ to 4, 4 to $4\frac{1}{2}$, and $4\frac{1}{2}$ to 5 pounds average, all individually frozen and packed in 100-pound boxes. Also, s. p. and shipped pickle on or pickle off.

FANCY MEATS: PORK

Loins, fresh and frozen.—Graded 10 pounds and under, 10 to 12 pounds, 12 to 15 pounds, and 16 to 22 pounds average. Boneless 10 pounds and under, and 10 to 12 pounds average. Pork loins popular for chops, 12 to 15 pounds average for roasts and 16 to 22 pounds average both for roasts and boning.

Boneless pork loins, made from the heavier end of 16 to 22 pound loins and 22-pound and up loins, are used by sausage makers for loin roll, also for Canadian bacon.

Skinned shoulders, fresh and frozen.—Graded 12 pounds and under, 12 to 15 pounds, and 16 pounds and up. Used for roasts and curing. Shoulders 16 pounds and up used by sausage makers for boning to obtain trimmings.

Boston butts, fresh and frozen.—Graded 8 pounds and under, 8 to 12 pounds, and 12 pounds and up, used for roasts and pork steaks. Can be cured and smoked, which method is becoming more popular yearly.

Pork tenderloins, fresh and frozen.—Frozen in 5 and 10 pound tin pails. A popular restaurant cut, also good demand through the retail markets.

C. T. cala butts, fresh and frozen.—Practically all sold frozen packed in 100-pound molds. This cut is made from a Boston butt. Sold to firms operating smokehouses. They are cured, then smoked. In great demand especially during the summer when fresh vegetables are on the market.

Neck fat.—Skinned and skin on. Used by sausage makers.

Brains, fresh and frozen.—Packed in 5 and 10 pound tin pails or can be packed frozen in boxes up to 100 pounds, also in barrels.

Kidneys, fresh and frozen.—Packed in 25 and 50 pound boxes. This product very popular in England.

Livers, fresh and frozen.—Packed in 25 and 50 pound boxes. There is a demand for pork livers through the retailer as well as a tremendous demand for frozen pork livers for export, mostly to Germany, for the purpose of making liver sausage.

Snouts, fresh and frozen.—Packed in 25, 50, and 100-pound boxes, also in barrels, fresh. This product is in demand by sausage makers.

Tripe, fresh and frozen.—Fresh packed in barrels, frozen in 100-pound molds. This product is in demand by sausage makers and canners.

Tongues, fresh and frozen.—Most popular method of packing is freezing in 100-pound molds. Tongues, in demand by canners, are cured and put up in glass.

Liver sweetbreads (pancreas glands).—Used by manufacturing chemists to make insulin. A great many pancreas glands are used in tanning preparations.

SWEET PICKLED MEATS

Kind desired: Regular hams, skinned hams, s. p. picnics or bellies.

Average weights: Regular hams, from 8 to 10 pounds to 18 to 20 pounds; skinned hams, 8 to 12 pounds and 12 to 14 pounds to 35 to 50 pounds; s. p. picnics, 3 to 5 pounds to 12 to 14 pounds; s. p. bellies, 4 to 6 pounds to 18 to 20 pounds.

DRY SALTED MEATS

Kind desired: Rough ribs, extra short clears and extra ribs, clear or rib bellies, fatbacks, regular or clear plates, jowl butts, shoulders.

Average weights: Rough ribs, 40 to 80 pounds at 5-pound spreads for each average; extra short clears and extra ribs 30 to 35 pounds to 40 to 50 pounds, clear and rib bellies, 20 to 25 pounds to 50 to 60 pounds; fatbacks, 6 to 8 pounds to 25 pounds and heavier; regular plates, 4 to 6 pounds and 6 to 12 pounds; clear plates, 3 to 5 pounds and 5 to 9 pounds; jowl butts, 2 pounds and heavier; shoulders, 8 to 10 pounds to 14 to 16 pounds.

SAUSAGE

There are two general classes of sausage, fresh sausage and summer or dry sausage.

Fresh sausage depends entirely upon the seasoning, cooking, and smoking for its flavor and palatability. Summer sausage is subject to a special process, that of curing at a specified temperature and humidity in a curing room. Mold has a part in the curing of certain summer sausage and its flavor, similar to the action of mold in the curing and flavoring of Camembert and Roquefort cheese.

Fresh sausage includes the following:

Country-style pork sausage.	Fresh linked sausage.
No. 1 pork sausage, or farmer sausage.	Bockworst.
Fresh sausage.	

Smoked sausage includes:

Frankfort-style sausage.	Frankfort sausage with no cereal.
Medium Frankfort-style sausage.	Vienna sausage.
Smoked linked sausage in oil.	Frankfort-style sausage in oil.
Bologna-style sausage with no cereal.	Knoblauch-style sausage.
Bologna-style sausage in bags.	Bologna-style sausage in oil.
Veal sausage.	Polish sausage.
Polish-style sausage.	Pressed luncheon specialty.
Minced luncheon specialty.	Delicatessen luncheon specialty.
Southern-style luncheon specialty.	Berlin-style luncheon specialty.

Cooked sausage includes the following:

Liver sausage.	Liver pudding.
Headcheese.	Suet.
Blood pudding.	Thuringer-style blood pudding.
Blood headcheese.	Tongue sausage.
Blood sausage.	Veal loaf.

Dry, or summer, sausage includes the following:

Cervelat.	Gothaer.
Holsteiner.	Export Goteborg.
B. C. salami.	Laddjaeger.
Swedish Methworst.	Lyon.
D'Arles summer sausage.	H. C. B. C. Arles Frisses.
H. C. B. C. Cervelat.	Mortadella.
Cappicola Milano.	Farmer Hosteiner.
Sorrento salami.	Domestic Goteborg.
Pepperoni.	

CASINGS

Practically all animal casings (rounds, middles, bungs, weasands, bladders, intestines, etc.) exported from the United States consist of cattle, calf, and hog casings. When an inquiry is received for casings the type desired should be specifically stated as follows:

Hog casings or small intestines.—Grades:

Extra narrow, packed 310 hanks per tierce, $1\frac{1}{8}$ inches and under in diameter.
Narrow medium, packed 305 hanks per tierce, $1\frac{1}{8}$ to $1\frac{1}{4}$ inches in diameter.
Selected medium, packed 300 hanks per tierce, $1\frac{1}{4}$ to $1\frac{3}{8}$ inches in diameter.
Medium wide, packed 290 hanks per tierce, over $1\frac{3}{8}$ inches in diameter.
Stump, packed 285 hanks per tierce, short pieces 3 to 6 feet in length. Each hank contains 100 yards.

Hog bungs.—Grades:

Export, packed 400 pieces per tierce, $1\frac{1}{8}$ inches and over in diameter.
Large prime, packed 500 pieces per tierce, $1\frac{1}{8}$ to $1\frac{1}{4}$ inches in diameter.
Medium prime, packed 550 pieces per tierce, $1\frac{1}{4}$ to $1\frac{3}{8}$ inches in diameter.
Small prime, packed 600 pieces per tierce, $1\frac{3}{8}$ to $1\frac{1}{2}$ inches in diameter.
Special small prime, packed 700 pieces per tierce, $1\frac{1}{2}$ inches and under in diameter.

FOODSTUFFS

Hog middles or "curly gut."—These are prepared in sets of $7\frac{1}{2}$ feet each and are packed approximately 200 sets per tierce.

Beef round casings.—Grades:

Narrow export, packed 225 sets per tierce, $1\frac{1}{8}$ inches and under in diameter.
Medium export, packed 190 sets per tierce, $1\frac{1}{8}$ to $1\frac{1}{4}$ inches in diameter.
Wide export, packed 140 sets per tierce, $1\frac{1}{4}$ inches and over in diameter.
Medium domestic, packed 180 sets per tierce, under $1\frac{1}{4}$ inches in diameter.
Wide domestic, packed 140 sets per tierce, $1\frac{1}{4}$ inches and over in diameter.
Each set contains 100 feet.

The export grades consist of casings that are clear, while the domestic grades contain a few nodules.

Beef middles.—Grades:

Medium wide, packed 110 sets per tierce, $1\frac{1}{8}$ inches and over in diameter.
Narrow medium, packed 125 sets per tierce, under $1\frac{1}{4}$ inches in diameter.
Stump, packed 95 sets per tierce, ungraded (all sizes).
Each set contains 57 feet.

Beef bungs.—Grades:

No. 1 large, packed 400 pieces per tierce, 4 inches and over in diameter.
Narrow medium, packed 500 pieces per tierce, under 4 inches in diameter.
Domestic, packed 400 pieces per tierce, ungraded (all sizes).

The No. 1 large and the narrow medium grades are clear, while the domestic contains a few nodules.

Beef bung skins.—These are the thin membranes or tissue stripped from the outer surface of beef bungs. They are used by perfumers for capping bottles, and for lining dirigibles and balloons. Grades:

No. 1, packed 4,000 pieces per tierce, 30 inches and over in length.
No. 2, packed 5,000 pieces per tierce, 24 to 30 inches in length.

Beef weasands.—Grades:

No. 1, 22 inches and over in length and 3 inches and over in width.
No. 2, 18 to 22 inches in length and 3 inches and over in width.
No. 3, 14 to 18 inches in length and $2\frac{1}{4}$ inches and over in width.

They are packed in barrels of 1,000 to 2,000 pieces and boxes of 5,000 to 6,000 pieces.

Beef bladders.—Beef bladders are either dried or pickled. Grades:

Large stuffing, capacity 12 pounds and over of contents.
Medium stuffing, capacity 10 to 12 pounds and over of contents.
Small medium, capacity 8 to 10 pounds and over of contents.
Small, capacity 6 to 8 pounds and over of contents.
Extra small, capacity 4 to 6 pounds and over of contents.

Dried bladders are packed in barrels, the pickled in tierces. Both types are sold by the dozen.

Sheep casings.—Grades:

Extra wide, 1 inch and over in diameter, 95 yards per bundle.
Wide, $\frac{3}{16}$ to 1 inch in diameter, 100 yards per bundle.
Medium, $\frac{1}{8}$ to $\frac{3}{16}$ inch in diameter, 110 yards per bundle.
Narrow medium, $\frac{1}{16}$ to $\frac{1}{8}$ inch in diameter, 120 yards per bundle.
Narrow, $\frac{1}{16}$ and under in diameter, 125 yards per bundle.

FATS AND OILS

OLEO OIL

There are four grades of oleo oil, and the grade should be stated on the trade opportunity form. They are as follows:

No. 1, made from highest-grade fats.
No. 2, made from cutting, machine, and poor killing fat.

No. 3, made from further cooking of bottoms from melting kettles and poor cutting fats.

Some manufacturers produce a special yellow oil, which is made by selecting the yellow fats in a raw state and processing them separately.

STEARINES

State kind: Oleo, lard, vegetable.

LARD OIL

There are many grades of lard oil, chief of which are the following: Special lard oil, made from pig's-foot stock or from a good grade of white grease chilled to 40° F., then pressed in a temperature of 38° to 40°. The yield is about 60 per cent oil, and the oil shows a cloud test at 30° F. It contains less than 2 per cent free fatty acid.

Extra winter strained oil shows a cloud test of 32° F. and contains 2 to 4 per cent free fatty acid.

Extra lard oil shows a cloud test at 35° F. and contains 5 per cent free fatty acid.

Export No. 1 lard oil shows a cloud test at 40° F. and contains 7 to 10 per cent free fatty acid.

No. 1 lard oil shows a cloud test at 48° to 50° F. and 15 to 20 per cent free fatty acid.

No. 2 lard oil shows a cloud at 50° F. and 20 to 25 per cent free fatty acid.

NEAT'S-FOOT OIL

Divided into 20° neat's foot and 30° neat's foot; 30° neat's-foot oil shows a ready flow at a temperature of 30° and a cloud test at around 27°; 20° neat's-foot oil will not solidify or even show a cloud test.

RED OIL

Oleic acid, elaine oil, distilled or saponified.

STEARIC ACID

Specify: Single pressed, double pressed, triple pressed (in bags).

FATTY ACIDS

State degree free fatty acid, and kind of fatty acids desired (for instance, cottonseed, corn, olive oil, etc.).

VEGETABLE OILS

State kind of oil, condition of oil—crude, refined, winterized, deodorized, filtered, etc., hydrogenated.

FISH OILS

State kind of oil: Pilchard, cod, cod liver, shark, menhaden, etc. Condition of oil: Crude, refined, deodorized, hydrogenated. Packing: Drums, barrels, tierces, casks.

COOKING FATS

State kind of fat: Lard, lard compound, vegetable compound. Exclude straight vegetable oils.

SOAPS

It is essential that the kind of soap desired be stated in every instance: Toilet, laundry, fancy, shaving, etc.

Weight of bars or other container; packing; and special marking, if any.

LIVESTOCK

Whenever a trade opportunity for livestock is received, the report should determine generally the kind, breed, sex, weight, and age of animal desired; whether purebred or grade, and the intended use (breeding, slaughter, dairying, drafting, for wool, etc.).

The height should be given in case of horses, mules, and asses. Mules intended for export to Italy are generally 14 hands 1 inch to 15 hands 2 inches or 57 to 62 inches high; 2 to 6 years old and good bone, blocky animals. Smaller mules are required in Greece—height, 46 to 58 inches; age, 4 to 10 years; strong, lively, gentle, saddle broken, and free from physical defects.

SUGAR, CONFECTIONERY, HONEY, EDIBLE NUTS

SUGAR

The United States imports more than half the sugar it consumes, and practically all the imports originate in Cuba. The 20 per cent preferential for Cuba in the United States sugar tariff makes it impracticable normally for other foreign sugars to compete in our market. Consequently it is useless to forward import trade opportunities in behalf of foreign firms desiring to sell sugar in the United States.

Considerable quantities of sugar, mostly refined, are exported from the United States, and trade opportunities for purchase are acceptable at all times. It is useless to forward requests for agencies for United States sugar exporters, however, as this trade is in the hands of large concerns maintaining their own foreign branches.

Where sugar is mentioned in a trade opportunity, the kind wanted should be clearly stated. Examples:

Sugar, raw, specify degree of polarization (that is, 96° centrifugal).
Sugar, refined (granulated).
Sugar, loaf (lump, crystal).
Corn (grape) sugar.
Maple sugar.

The kind of packages should be described. Raw sugar is sold in burlap bags; refined sugar is sold in burlap bags, in barrels, or in cardboard cartons containing 1, 2, or 5 pounds.

Sirups and molasses.—Corn or glucose sirup, maple sirup, cane sirup, golden or refiners' sirup, and molasses (a) edible, (b) inedible (blackstrap).

CONFECTIONERY

Considerable confectionery is exported by the United States and this trade is growing. "Confectionery" is an all-inclusive term, and it is imperative that trade opportunities specify the kinds desired.

The main classes of confectionery are:

Hard candies (specify further whether stick candy, drops, mints, etc.).
Pan work (caramels, fondants, etc.).
Chocolate-covered bars and pieces; nut, fruit, cream, or solid centers.
Chocolate (sweetened) solid bars.
Chewing gum.

The local wholesale and retail price (in United States currency equivalent) should appear on the trade opportunity.

The type of container is an important element in the cost of confectionery. Especially for shipment to tropical or semitropical regions, great care must be exercised to prevent rapid deterioration. Glass jars with friction or patent tops, tins (hermetically sealed or otherwise), and cardboard boxes (plain or fancy) are the usual original containers. Little candy is exported in bulk.

Most prospective foreign purchasers ask for samples. It costs most manufacturers about \$100 to make up a full set and ship it abroad. This has resulted in important losses where the inquirer failed to place an order subsequently. On every trade opportunity for confectionery there should appear a definite statement as to whether or not the applicant will meet a reasonable expense to cover cost of samples requested.

Some foreign offices have submitted a number of trade opportunities for confectionery in spite of the fact that a prohibitive import duty or other obstacle made business impossible. It costs American manufacturers time and money to check up such things and greater care should be exercised in this respect. In case of doubt as to whether duties or other factors are sufficiently adverse, send in the opportunity but state all the facts.

HONEY

Specify whether comb or extracted (liquid) honey is wanted and the type and grade, as follows:

	Color grade
White clover.....	White to light amber.
Alfalfa.....	White to dark.
Sweet clover.....	White to light amber.
Buckwheat.....	Dark (strong flavor).
Orange.....	White.
Sage.....	White.
Tupelo.....	Light amber.
Thistle.....	White to light amber.
Mesquite.....	White.
Basswood.....	White (heavy body).
Fireweed.....	Water white.

The different types sell at widely divergent prices. Usual packing for export is in 160-pound kegs or in 60-pound tins, 2 tins to the case, in the case of extracted honey, and in standard glass-front shipping case containing 24 sections, 14 ounces to section, for comb honey.

EDIBLE NUTS

The only nuts exported in any quantity by the United States are peanuts, and these are also imported to some extent. Consequently, most trade opportunities for nuts which have been received have been import opportunities.

Government agencies are not permitted to extend active assistance to imports of commodities which compete directly with domestic produce, and consequently import opportunities should not be submitted for peanuts, almonds, walnuts, pecans, or filberts. Applicants for such aid should be referred to the consular officers of their own country or to commercial directories.

In the case of nuts not produced in important quantities or at all in the United States, such as Brazil nuts, cashew nuts, pistachio nuts, etc., our service is at the disposal of foreign exporters.

MISCELLANEOUS VEGETABLE FOOD PRODUCTS

HOPS

When a trade opportunity covering hops is submitted it should be stated whether New York, Washington, Oregon, or California hops are desired; the size and character of packing should be specified; and the local sales price of hops should be noted on the trade opportunity form whenever possible.

The hops produced in New York State differ somewhat from those grown in the West and generally command higher prices. However, total production in New York is small, the bulk of the crop coming from the Western States specified. It is impracticable to distinguish physically between the varieties grown in those States, the difference being matters of trade description and price.

YEAST

Two kinds of yeast are manufactured and exported, compressed and dried. The compressed yeast must be kept in a refrigerator and consumed within a relatively short time. The dried yeast does not need to be stored in ice boxes, and will keep for an indefinite period.

Trade opportunity reports should indicate the kind of yeast desired, for what purpose it is to be used, and whether by the commercial baker or housewife.

STARCH

When starch is mentioned as a trade opportunity, the kind wanted should be stated: (a) Whether in package form or in bulk (if in package form, size of containers preferred should be given); (b) whether for food or industrial uses; (c) if corn starch, whether powdered or pearl (these are the same in quality but the powdered costs more).

The local wholesale price of articles similar to those mentioned in the trade opportunity should be quoted, giving the United States currency equivalent, and a small sample (1 ounce) of the type of starch desired should be inclosed when possible.

BAKING POWDER

Baking powder is a leavening agent produced by the mixture of an acid-reacting material and sodium bicarbonate, with or without starch or flour.

The acid-reacting ingredient of baking powder may be either tartaric acid or its acid salts, acid salts of phosphoric acid, compounds of aluminum, or a combination of the foregoing.

Trade opportunities should state the kind of baking powder desired and the kind and size of container preferred. As several countries have pure-food laws which prohibit the use of certain ingredients in baking powder, any such regulations should be stated.

DAIRY AND POULTRY PRODUCTS

Butter.—Specify whether salted or unsalted butter is wanted; also kind of package, whether tubs, casks, cartons, or tins and, if cartons or tins are wanted, indicate the size or sizes. Sizes range from $\frac{1}{4}$ to 1 pound for cartons.

Cheese.—Specify type of cheese and package wanted, whether it is to be put up in cans or boxes, and the size of package preferred.

Eggs.—Designate whether fresh or frozen eggs are wanted; also whether brown or white eggs are preferred or whether ungraded, unselected eggs are acceptable.

Poultry, dressed.—Designate weight per dozen and whether or not any specific method of packing is preferred.

TROPICAL PRODUCTS

The following products are treated from the standpoint of exportation from the United States. With the exception of roasted coffee, manufactured breakfast cocoa, unsweetened chocolate, cocoa butter, flavoring extracts, and fruit juices, they are noncompetitive with American goods. Therefore, the instruction below may apply as well to the importation of coffee, cocoa, tea, spices, and bananas into the United States.

The term "colonial products" should never be used in connection with these products, since it is too general to be of any practical aid in the buying or selling of any one of the items.

Coffee.—Specify whether green or roasted coffee is desired. If green, give types or kinds desired. If roasted, state preferences as to light or dark roast, kinds or blends, kinds of packages, and any special market requirements.

Cocoa, chocolate, and cocoa butter.—State whether the raw cocoa bean (sometimes known as cacao) or breakfast cocoa is desired; specify kinds or blends; state whether chocolate is to be unsweetened and whether it is to be used for cooking purposes.

Spices, including vanilla beans and spice seeds.—Specify the kind of spice desired, i. e., whether black, white, or red pepper; nutmegs; ginger; etc.; also whether ground or unground, whether from Java, India, Grenada, Jamaica, etc.; specify any preferences as to packing.

Flavoring extracts and fruit juices.—Specify kind, whether vanilla or lemon, etc., sort of packing necessary to meet trade requirements. For fruit juices, differentiate between juices, sirups, and crushed fruit. If possible, state for what purpose they are desired; whether for confectionery and baking trades, soda fountain and soft drinks, or culinary purposes; also whether in concentrated form. State preferences as to flavors, colors, size of containers, and special packing.

Bananas.—This fruit is not exported from the United States except as foreign merchandise. In the event that there is an opportunity for the sale (or purchase) of this product, it should be stated whether Cuban, Jamaican, Guatemalan, Colombian, etc., is desired. Also, the size of the bunches, large or small fruit, and any special methods of shipments should be noted.

Tea.—Tea is exported from the United States only as foreign merchandise, but in case there is a sale for this product as packaged by American houses it should be described very fully, stating whether green or black, type, blends, etc.

TOBACCO

In the absence of standardized tobacco grades the matter of establishing a basis of understanding between buyer and seller is extremely difficult. In many instances our tobacco exporters have

incurred the expense of sending prospective customers an expensive line of samples without having a single lot represented that could be used. The word "Kentucky," for instance, is typically indefinite and might be applied to at least four types grown in that State.

The following descriptive outline, which has been constructed for the assistance of the prospective purchaser, may be followed to the greater satisfaction of both buyer and seller.

LEAF TOBACCO

Leaf: Seconds, lugs, trash, scraps, stems.

Length; color; texture; air dried; steam dried.

Product to be manufactured (uses).

Bright flue cured, burley, dark fired Kentucky and Tennessee, dark Virginia, Maryland, Ohio export, Green River, one sucker, Henderson or stemming, cigar leaf, strips (of any type).

State quantity.

MANUFACTURED PRODUCTS

Specify: Cigars, cigarettes, smoking tobacco (cut), plug tobacco (smoking or chewing), twist.

Generally speaking, all tobaccos may be classified as flue cured, fire cured, or air cured. Flue-cured tobaccos are light in color and texture; fire-cured tobaccos are dark and heavy; and the air-cured types may be either dark or light, depending on soil conditions and the type of tobacco.

TYPES OF TOBACCO

Bright flue-cured.—The bright flue-cured type is produced mainly in the Carolinas and Virginia and in lesser quantities in Georgia and Florida. It is used in the manufacture of cigarettes, smoking tobacco, and certain kinds of plug tobacco which may be used for either smoking or chewing. In preparing a trade opportunity for this type of tobacco it will be advantageous to state clearly whether a cigarette or cutting tobacco is desired; whether the texture of the leaf should be of thin priming variety or of better body; and whether common, medium, or good grades are desired.

Burley.—More than 75 per cent of the burley type grows in Kentucky, although appreciable quantities are being produced in Tennessee, Ohio, Indiana, and several other States. It is used in the manufacture of plug tobacco, smoking tobacco, and cigarettes.

Dark-fired Kentucky and Tennessee.—This type grows in the regions of western Kentucky and Tennessee. It may be a one sucker, a Clarksville and Hopkinsville variety, a Paducah and Mayfield, or a Henderson, and is one of the principal export types. Principal uses are in the manufacture of plug tobacco, smoking tobacco, snuff, and Italian cigars. Strong in nicotine content.

Dark Virginia.—The dark Virginia type embraces both the fire-cured and sun-cured dark tobaccos of Virginia, and trade opportunities should state which is desired. This is also an export type, having practically the same uses as the dark tobaccos of Kentucky and Tennessee.

Maryland and eastern Ohio export.—Dry tobaccos with good burning qualities; air cured; produced in southern Maryland and eastern

Ohio. Principal markets are France, the Netherlands, and Belgium. Used principally in the manufacture of cigarettes and smoking tobacco.

Green River.—An air-cured tobacco produced principally in the Green River section of Kentucky in the Owensboro and Henderson districts. Used in the manufacture of smoking and chewing tobacco and snuff.

One sucker.—The one suckers are both fire cured and air cured; produced in Kentucky, Tennessee, Virginia, and Indiana. Uses about the same as Green River.

Henderson or stemming.—A type closely resembling the Green River and produced in the same regions. May be air cured, fire cured, or fire cured.

Cigar types.—The cigar types are produced principally in Pennsylvania, New England, Wisconsin, and Ohio. Florida and New York produce small quantities. Used in the domestic manufacture of cigars as wrapper, binder, and filler. Small quantities exported.

Strips.—Strips represent that part of the leaf which remains after the midrib has been removed. It is stemmed tobacco, and obviously may belong to any type.

Too much emphasis can not be placed on the necessity of naming the use for which the tobacco is intended. This will aid the exporter in anticipating the needs of his customer, should full details be lacking.

Under the heading "Packing instructions," it would be well to state the kind of container preferred (whether hogheads, tierces, or cases) and the approximate weight of packages.

FRESH FRUITS

APPLES

Apples for export from the United States are usually packed in barrels or boxes. The box is the principal container for apples in the northwestern section of the United States (Washington, Oregon, etc.), while the barrel is used principally in the eastern (New York, Virginia, etc.) and midwestern (Michigan, Illinois, etc.) States.

The following specifications from the laws of a typical boxed-apple State, Washington, are representative:

Extra fancy or first grade shall consist of apples of one variety which are mature, clean, hand picked, well formed, free from bruises, limb rub, spray burn, sun scald, russetting, drought spots, hail marks, visible water core, broken skin, and from other damage caused by disease, insects, or mechanical means, except that russetting at the stem-end characteristic of the variety shall be permitted. Each apple shall have the amount of color hereinafter specified for apples in this grade.

Fancy or second grade shall consist of apples of one variety which comply with specifications for extra fancy grade (except for color) except that they may be fairly well formed and that scab spots affecting not to exceed a total area of one-fourth inch in diameter or limb rubs, slight drought spots, slight hail marks, or heavy russet affecting a total area not to exceed one-half inch in diameter and slight russet, slight sun scald, and two small healed stings on red varieties showing extra fancy color and yellow and blushed varieties having extra fancy specifications shall be permitted. Each apple shall have the amount of color hereinafter specified for apples in this grade.

C grade or third grade shall consist of apples which are fairly well formed, free from infection, visible water core, soft bruises, and broken skin, provided that scab spots affecting a total area not to exceed one-half inch in diameter and not exceed five small healed stings shall be permitted in this grade. Apples of this grade must not be marked "choice." Each apple shall have the amount of color hereinafter specified for apples in this grade.

In addition to the above grades there are combination grades and culls.

With reference to color requirements, the above specifications read:

Apples shall be admitted to the first and second grades subject to the following color specifications. The percentage stated refers to the area of the surface, which must be covered with a good shade of red characteristic of the variety.

For the striped or partial red varieties the percentage of color required shall be the specified percentage of area in which the stripes of good red shall be in preponderance over the stripes of thin red, green, or yellow.

The following are the color percentages given in the above specifications for some of the export varieties: Solid red varieties—Baldwin, extra fancy 75 per cent, fancy 25 per cent, C grade some characteristic color; winesap, same percentages; striped or partial red varieties—delicious, extra fancy 65 per cent, fancy 25 per cent, C grade some characteristic color; Stayman winesap, same; Jonathan, same; McIntosh red, same; Ben Davis, extra fancy 50 per cent, fancy 15 per cent, C grade some characteristic color; York imperial, same; and Gravenstein, same.

Apple specifications of the State of Virginia, a typical barreled-apple State, include apple grades prepared by the United States Department of Agriculture, as follows:

In the following specifications the grades are designated as U. S. No. 1, etc., since the text has been promulgated by the United States Department of Agriculture as the official standards for the inspection of barreled apples.

U. S. No. 1 shall consist of one variety which are clean, hand picked, mature but not overripe, free from decay and from damage caused by dirt or other foreign matter, by skin punctures or bruises except those incident to proper packing, or by spray burn, russetting, limb rubs, sun scald, visible water core, hail, disease, insects, or mechanical or other means. Each apple of this grade shall have the amount of color specified hereinafter for the variety. In order to allow for variations incident to proper grading and handling, not more than 10 per cent by weight of the apples in any lot may be below the requirements of this grade, but not more than one-tenth of this amount, or 1 per cent, shall be allowed for decay.

Other United States apple grades are U. S. fancy, U. S. commercial, and U. S. No. 2. Most States permit the packer to use either the State or United States grade.

The color requirement on U. S. No. 1 apples of solid red color is 25 per cent for Winesap or similar apples; for striped or partially red apples, the color requirement is 25 per cent for Delicious, Jonathan, McIntosh, and similar varieties and 15 per cent for Baldwin, Ben Davis, Rome Beauty, Stayman Winesap, York Imperial, and similar varieties. Only 10 per cent is required for Gravenstein and similar varieties.

The above apple grades represent standard boxed and barreled apple grades in use throughout the United States. While the specifications of leading exporting States have been given, it should be noted that the specifications of other important apple-producing States are in substantial accord with those given. Attention is invited to the fact that neither the States nor the United States have adopted any special grades for export purposes.

Persons or concerns desirous of purchasing apples from the United States should specify variety (Jonathan, York Imperial, etc.); packing (box or barrel); size (boxed apples, 200, 213, etc., to box, or barreled apples, 2-inch, 2½-inch, etc.). Price, terms of payment, and shipping instructions should be clearly and fully stated in order that there may be no confusion in the mind of the United States exporter.

The foreign importer should be informed that his request for the names, etc., of United States fresh-fruit exporters with whom he may establish contacts will be submitted confidentially to United States exporters in order that they in turn may communicate with the importer.

VEGETABLES

Beans, dried.—Specify type (lima, small white, large white, black-eye, Bayo, pinto, cranberry, red kidney, etc.) and grade. Beans are usually shipped in bags of 100 pounds each.

Potatoes, white.—Specify size of potatoes and packing preferred—whether in bags or crates.

Onions.—State size according to diameter in inches, packing preferred (whether crates or bags should be used), and type of onion desired (Bermuda, yellow, white, etc.).

Leafy and succulent vegetables.—A general description of the vegetable and the quantity desired is usually sufficient, as packing for shipment is fairly uniform for each kind of vegetable.

A World Trade Directory report should accompany every trade opportunity submitted unless such report has been submitted within a reasonably recent time.

IRON AND STEEL, AND HARDWARE

Iron and steel.—In purchasing iron and steel products it is well to remember that the minimum price obtainable is based on a railroad carload of material, which is 36,000 pounds. In all instances it is best to avoid the terms "iron and steel products" and "construction materials," and to state the exact item or items wanted.

In this group under "iron and steel" are included such items as pig iron, scrap, ingots, bars, wire rods, plate, skelp (for pipe making), metal lath or expanded metal, rails and accessories for both steam and street railway work, boiler tubes, casing and oil-line pipe, pipe fittings both malleable and cast iron, cast-iron pipe, barbed wire, fencing, wire cloth and screen, wire rope, insulated wire, nails, bolts and nuts of iron or steel, castings, forgings, car wheels, and horseshoes. Inquiries for any of the above should give as complete specifications as possible as to sizes, lengths, qualities, and quantities.

Galvanized and black sheets are always sold for export by Birmingham gage (B. G.), except in cases where the number of sheets per crate of a given weight are specified. Tin plate is specified as "sheets 14 by 20 by 112 inches per box of 100 pounds net," or to some other sizes. Structural shapes include angles, channels, I-beams, tees, zees, etc. Welded pipe is usually the ordinary type of gas, water, and steam pipe, and the type of thread is usually specified. Wire is usually sold according to the Birmingham wire gage (B. W. G.). Wood screws of iron or steel are also included in this group, as are bars for concrete reinforcement.

Hardware.—The term "hardware" should not be used alone in a trade opportunity because of its generality. The class of hardware at least should be given. It would be preferable to list, in addition, the specific articles wanted. For instance, while "builders' hardware" would be sufficient, it would be better to specify the items desired, such as hinges and butts, door knobs, window locks, etc. Other general classifications of hardware are automobile hardware, furniture hardware, casket hardware, saddlery and harness hardware, marine hardware, and plumbers' hardware.

Household ware.—The kind of ware (whether aluminum, enameled, or galvanized iron) should be specified.

Tools.—As in the case of hardware, the term "tools" should be amplified by at least a statement of the class of tools desired, such as carpenters' tools, garden tools, etc. Even better than this would be to name the specific items wanted, as chisels, hammers, saws, etc. Other general classifications of hand tools are blacksmiths', boiler-makers', coopers', draftsmen's, loggers', masons', miners', painters', plumbers', precision instruments, stonecutters', and tinmiths'.

The following are some of the many products which are included in the hardware group:

Cutlery:

- (a) Razors (safety, straight) and blades.
- (b) Scissors and shears.
- (c) Table and kitchen cutlery.
- (d) Butchers' cutlery.

Heating and cooking equipment (always mention kind of fuel to be used):

- (a) Cooking stoves and ranges.
- (b) Heating stoves.
- (c) Furnaces.
- (d) Water heaters.
- (e) Heating boilers.
- (f) Radiators.

Abrasives:

- (a) Natural abrasives, such as wheels of emery or corundum, grindstones, hones, whetstones.
- (b) Artificial abrasives, such as wheels, paper, cloth, steel wool.

Illuminating devices:

- (a) Lamps.
- (b) Lanterns.
- (c) Gas-lighting appliances.

Plumbing fixtures:

- (a) Bathtubs.
- (b) Bidets.
- (c) Closet bowls.
- (d) Lavatories.
- (e) Kitchen sinks.
- (f) Laundry trays.

Bank equipment:

- (a) Safes.
- (b) Bank vaults.
- (c) Safety-deposit vaults.

Needles:

- (a) Hand.
- (b) Machine.

Scales:

- (a) Balance.
- (b) Spring.
- (c) Counter.
- (d) Computing.
- (e) Household.

A World Trade Directory report should accompany every trade opportunity submitted, unless such report has been submitted within a reasonably recent time.

LEATHER AND RAW HIDES

FINISHED LEATHER

Sole leather: Vegetable tanned or chrome; hard rolled or mellow finish.

Upper leather: Calf upper; specify blacks or colors.

Side upper leather: Specify blacks or colors.

Patent leather: Specify whether side patent, calf, goat and kid, or horse and colt is required.

Goat and kid upper leather: Specify blacks or colors.

Sheep and lamb upper leather: Specify blacks or colors.

Fancy leathers: Specify purpose for which these leathers are to be used.

Upholstery leather: For furniture or automobiles.

Shoe lining leathers: Kid or sheep skin.

Bag, case, and strap leather: Specify whether cowhide, goat, or pig.

RAW HIDES

While the United States does export considerable quantities of domestic hides and skins, inasmuch as this is an essential raw material the policy has been established not to encourage foreign buyers of this material. Therefore it has been the practice to disapprove practically all such trade opportunities when received after due and careful consideration has been given to each individual case.

In every instance it is necessary that a World Trade Directory report accompany each trade opportunity unless such report has been submitted within a reasonably recent time.

LUMBER

Lumber trade channels are definitely established in the majority of foreign markets, and permanent satisfactory export business in this commodity can be developed only through such channels. It is suggested that trade opportunities be not submitted unless they are in accordance with details below. Trade opportunities submitted from agency markets (see par. 1) will be disapproved unless submitted on behalf of firms established and recognized in the trade as agents or brokers, agent-importers, or branch offices of American exporters.

1. *Agency markets*.—Europe, Africa, and Cuba, generally, and South America to considerable extent.

(a) Agents or brokers who are doing business on a commission basis and carrying no stocks and acting (or to act) as direct or exclusive representatives of American exporters. This would include sub-agents for agents or brokers in other countries.

(b) Agent-importers handling lumber at times as agents on commission basis and at times also purchasing outright from American exporters for their own account. Not recommended unless separate and distinct lines are so differently handled.

(c) Branch offices of American exporters acting as agents or representatives.

2. *Direct-purchase markets*.—Asia, Australia, New Zealand, Canada, Mexico, West Indies other than Cuba, and Central America. It is obvious in nonagency markets lumber importers buy direct. In a few markets (Australia, New Zealand, Canada, Mexico, and the Far East) both agents and importers are recognized locally as proper channels, but importers are in the majority in those countries.

In (1) countries where agents or brokers are recognized, be sure to indicate whether inquirer is (a) agent or broker, (b) agent-importer, or (c) branch office of an American exporter. In (2) direct-purchase countries, state if inquirer is importer, or if a dealer or consumer insists on trade opportunities, state his status. Information in regard to previous dealings in American lumber is valuable and should be mentioned when possible. The lumber division encourages the passing of orders through agents whenever this procedure is considered a usual channel of trade.

In forwarding lumber trade opportunities show also the date of any previous lumber trade opportunities that have been sent in.

It would be of material assistance to the American lumber trade, in specifying a firm's general reputation as to methods of handling business, that particular attention be paid to whether they are in the habit of entering claims on shipments and whether or not the claims are fair and legitimate ones. Especially with agents or brokers, the American exporter is more interested in how efficiently the firm handles its business rather than the amount of money it has in

the bank, and in the majority of cases a progressive foreign agent that does not make unfair or unjust claims is considered the better agency connection. Also state whether agents are well established and energetic or merely order takers.

Give kind, species, and quality (grade) of wood in every case.

In every case give also the grading rules governing, if known. If possible, give purpose for which stock is to be used. There being no grading rules for logs, ask inquirer to furnish description of what is expected.

Box shooks.—Specify rough sawn, smooth sawn, or planed (dressed); whether boards, veneer, or plywood. By box shooks is meant the component parts of a complete box. (In connection with plywood boxes, see "Plywood.") Give inside dimensions, length, width, and depth of finished box and thickness of each part (ends, sides, top, bottom, and cleats) to be given separately or exact length, width, and thickness of each part. State whether box has cleats on ends or battens (one or more series of strips encircling and reinforcing sides, top, and bottom back from ends). If either, give number and dimensions. State number of pieces composing sides, ends, tops, and bottom, and whether lock corner, tongued and grooved, or Linderman jointed stock is required. State requirements in regard to quality, color of wood, whether it must be odorless or not, requirements as to stamping, printing of trade brands, marks, etc., and strapping and packing instructions.

Cooperage shooks.—Tight or slack cooperage shooks include staves, heading, and hoops (the latter of metal or wood if requested by buyer) to make a certain number of complete barrels.

Doors.—Furnish catalogue, style or sketch, and quality (grade). State kinds of wood for stiles, rails, and panels. Give length, width, and thickness of door, width of stiles and rails, and thickness of panels. (If panels of plywood, see "Plywood.")

Handles.—State whether (1) plow and similar bent handles; (2) hoe, fork, shovel, or similar long handles; (3) handles for striking tools, i. e., pick, sledge, hammer, hatchet, axe, adz, mattock handles, etc.; or (4) broom, mop, or similar handles, rough, shaped, or finished. State kinds of woods and quality (grade). Give exact size and diagram of shape.

Logs.—State whether for veneer or lumber (or poles or piling to be used as is); with or without bark; minimum diameter at small end; average diameter; length.

Lumber.—Includes sizes up to 6 by 6 inches. Specify rough sawn or planed (dressed). Give width, thickness, minimum and average length.

Plywood.—State species of wood to be used in face, also core (and back) when important; purpose for which stock is required and whether vegetable, casein (waterproof), or other (waterproof) glue is desired; sanded or rough. State quality, length, width, thickness, number of ply, thickness of each, and bundling.

Preserved or treated wood.—Includes ties, poles, piling, and timbers for railroad use, harbor use, and other heavy construction. Give kind of preservative treatment desired.

Ready-cut and portable houses.—State size, number of rooms, and type. If available, furnish plans or sketch.

Staves.—Includes tight staves (for liquids), sawn, split, rough, or dressed; also slack staves (for apples, potatoes, cement, etc.), sawn, rough, dressed, tongued and grooved. State length, thickness, minimum and average width.

Timber.—Includes 6 by 6 inches and larger. Specify hewn or sawn, minimum dimensions, minimum and average length, also cubic-foot average content if so purchased in the market.

Ties.—Specify hewn or sawn, width, thickness, and length. If not rectangular in cross section, furnish sketch.

Veneer.—Specify sanded or rough, quality, length, width, thickness, and bundling.

Wooden barrels.—Specify tight or slack, new or secondhand.

Milkwork, specialties, etc.—Describe as fully as possible.

A World Trade Directory report should accompany every trade opportunity submitted unless such report has been submitted within a reasonably recent time.

INDUSTRIAL MACHINERY

Specific information is required on trade opportunities classified in the industrial-machinery group; complete information as to the buyers' wants must be given to enable the supplier to quote prices intelligently.

Trade opportunities calling for specialties or novelties in machine tools, metal-working machinery, textile machinery, etc., are too indefinite and can not be used.

STEAM-PLANT EQUIPMENT

Steam engines:

Horsepower required.

Steam pressure.

Temperature.

Speed desired.

Back pressure and condenser conditions.

Type of engine, stationary reciprocating, marine reciprocating, mechanical-drive turbine, steam-turbine marine.

Where engine accessories and parts are desired, complete information should be given with regard to the connections, the type of accessories and parts and purposes for which they are used, and where parts are to be fitted to any particular machine, the make of the machine, the serial number, and a detailed description of the parts required.

Boilers:

Horsepower.

Number.

Type—

Fire tube.

Heating.

Locomotive.

Marine.

Portable.

Tubular.

Water tube.

Heating surface desired.

Type of firing—Coal, oil, etc.

Purposes for which it is to be used.

Available floor space.

Mechanical stokers:

Capacity.

Type of equipment desired (under or over fed).

Kind of coal.

Type of boiler for which they are to be used.

Specifications with regard to the boiler, namely, heating surface, capacity, etc.

Oil-burning equipment (industrial):

Heating surface to be covered.

Kind of oil to be used.

Pressure.

Capacity of oil tank.

Type of boiler in which it is to be used.

Steam specialties:

Size of the inlet and outlet connections.

Type of equipment desired.

Purposes.

For what kind or class of boiler and steam equipment will it be used—Steam traps, hot-water heaters, oil heaters, exhaust heads, and oil separators.

Capacity.

Pressure.

System.

Condensers, heaters, and accessories:

Capacity.

Type of equipment to which to be applied.

Inlet and outlet.

Pressure.

Kind of system.

Water-cooling towers (including spray ponds):

Capacity of tower.

Height of tower.

Capacity of steam plant.

Space available.

With the spray pond, the number of outlets for spraying, capacity of pond, and size of pond.

Valves (iron and steel body):

Type of body—

Air.

Acid.

Ammonia.

Gas.

Hydraulic.

Regulating.

Relief.

Throttle.

Sprinkler heads.

Sluice gates, large water valves, and accessories.

Valves (iron and steel body)—Con.
 Pressure.
 Inlet and outlet sizes.
 Purpose for which the valve is to be used.
 Type of equipment.
 Present pipe threading.
 Boiler accessories: (ash ejectors, gauges, injectors, fuel economizers, and damper regulators):
 Type of boiler on which to be used.
 Present capacity of boiler.
 System.
 Facilities.
 If possible, blue-print diagrams showing the present set-up.

INTERNAL-COMBUSTION ENGINES, WATER WHEELS, WATER TURBINES, ETC.

Diesel and semi-Diesel over 10 horsepower, stationary and portable:
 Capacity of engine.
 Type of fuel.
 Purpose for which it is to be used.
 Temperature of working conditions.
 Electric ignition engines over 10 horsepower:
 Capacity.
 Fuel.
 Purpose for which to be used.

Marine engines, Diesel and semi-Diesel:
 Capacity of engine.
 Drive.
 Space available.
 If an auxiliary, state so.
 Other marine engines of the internal-combustion type:
 Fuel.

Horsepower.
 Floor space available.
 Type of drive.
 Engines, gasoline or kerosene:
 Capacity.
 Horsepower.
 Drive.
 Floor space.

Water wheels and water turbines:
 Capacity.
 Revolutions per minute.
 Height of water fall.
 Angle of deflection.
 Size of inlet and outlet flow.
 Water pressure.

Water-wheel governors and accessories:
 Inlet and outlet.
 Type of equipment desired.
 If to fit on some equipment already installed, give name of manufacturer and serial number of machine.

CONSTRUCTION AND CONVEYING MACHINERY

Excavators (including power shovels):
 Capacity of the machine.
 Length of boom.
 Type of drive of machine, such as—
 Diesel.
 Semi-Diesel.
 Steam.
 Electric.
 Type, such as—
 Drag line.
 Clamshell.
 Orange peel.
 Scoop.

Type of material to be handled.
 Dredging machinery:
 Type of dredge.
 Capacity.
 If boom type, capacity of dipper and length of boom.
 Type of material to be handled.
 Is dredge to be used for carrying silt to sea in own bottom, for loading on barges, or for depositing in spoilage basin?
 Draft of barge and depth of navigable waters.
 Width and length of dredge.
 Type of hull.
 Capacity of pumps for hydraulic suction.

Pile drivers:
 Length of piles to be driven.
 Type of piling—wood, concrete.
 Depth to which pile is to be driven.
 Type of soil into which piles will have to be driven.

Buckets for excavating and dredging equipment:
 Kind of bucket—
 Drag line.
 Clamshell.
 Orange peel.
 Scoop.

Capacity to be handled.
 Type of equipment on which to be used.

Type of material to be handled.
 Concrete mixers:
 Capacity of mixer.
 With or without loading device.
 Self-operating.
 Type of drive.

Concrete-block machinery:
 Type of blocks to be manufactured.
 Capacity of equipment desired, per hour or per day.

Concrete-tower equipment:
 Capacity of tower.
 Length of chutes.
 Height from ground.

Road rollers:
 Capacity of roller.
 Type of roller—Gasoline, crude oil, or steam.
 Whether sectional or in one piece.
 Other road-making equipment (smoothers, spreaders, etc.):
 Exact equipment desired.
 Whether to be operated by air, gasoline, electricity, etc.
 Rock crushers:
 Capacity.
 Size of screening desired.
 Type of drive.

Ditchers:
 Width of cut.
 Speed of travel.
 Type of drive.
 Soil conditions.
 Kind of soil.

Paving machines:
 Type of paver.
 Width.
 Class of material to be handled.
 Type of drive.

Tar and oil spreaders:
 Type of spreader.
 Width.
 Class of material to be handled.
 Type of drive.

Asphalt mixing and preparing equipment:
 Size of mixers.
 How asphalt is to be heated.
 If portable, whether drawn by truck or self-propelled.

Road graders and scrapers:
 Width of grader.
 Horse or motor drawn.
 If self-propelling, type of drive.
 Kind of roads on which to be used.

General construction equipment (elevators for lifting materials or for hoisting concrete form materials):
 Exact equipment required.
 Size.
 Work on which it is to be used.

Jacks:
 Type.
 Capacity.
 Height of lift.
 Winches:
 Width of drum.
 Yardage of cable or rope to be wound.

Type of drive.

Cranes:
 Capacity.
 Type.
 Auto truck and locomotive.
 Swinging boom.
 Portable.

Wrecking.
 Furnace charging.
 Gantry.
 Traveling.
 Floor and wall.

Cranes—Continued.
 Length of lift for—
 Wall.
 Floor.
 Furnace charging.
 Gantry.
 Traveling.
 Length of overhead.
 Height from floor.
 Distance of travel for portable cranes, such as locomotive, swinging boom, and auto-truck cranes.
 Length of boom.
 Height of lift.
 Type of work.

Hoists and derricks:
 Capacity.
 Type of work for which to be used.
 Length of boom.
 Type—
 Hydraulic.

Steam.
 Gasoline.
 Steel.
 Timber—
 Height of lift.

Type of drive.
 Beam trolley and monorail hoists—
 Length of trolley.
 Angles of curves.
 Height of lift.
 Type of drive.

Elevators:
 Capacity.
 Size of shaft.
 Total travel.
 Distance between floors.

Number of floors to be traveled.
 Whether overhead drive or from basement; traction, gearless, or drum.
 High speed or slow speed.

Type of control desired—
 Push button.
 Hand rope.
 Car switch.
 Automatic or semiautomatic.

General floor plans.
 Conveyors:
 Capacity.
 Kind—
 Belt.

Bucket.
 Pneumatic tube.
 Gravity type.
 Kind of material to be handled.
 If for more than one floor, the height between floors and the total length of travel of conveyor system.

Width.
 Loading and piling devices:
 Capacity.
 Lift.
 Height and type of material to be handled.

Loading and piling devices—Con.
 Size of equipment, such as—
 Height.
 Width.
 Length (possibility of maneuvering in factories or warehouses).
 Cableways:
 Length of travel.
 Capacity.
 Type of drive.
 Escalators:
 Width and length of travel.
 Type of drive.
 Period of operation.
 Height between stories.

MINING AND QUARRYING, OIL-WELL, AND PUMPING MACHINERY

Mining and quarrying:
 Type of mining.
 Kind of material to be mined.
 If coal, type of veins—
 Horizontal.
 Vertical.
 At an angle.
 Width and height.
 Capacity per day.
 Coal cutters:
 Type of cutter.
 Kind of coal.
 Width and height of vein.
 Type of vein—
 Horizontal.
 Vertical.
 Angular.
 Overcutting and undercutting equipment desired.
 Rock drills:
 Size of drill.
 Depth of ore.
 Whether air or electrical operation.
 Type of stone in which drill is to be used.
 Mine hoists and derricks:
 Derricks—
 Height.
 Type (steel, wood, stiff-leg, etc.).
 Capacity.
 Length of boom.
 Motive power.
 Hoists—
 Type.
 Capacity.
 Height.
 Motive power.
 Triples:
 Capacity.
 Automatic or semiautomatic.
 How conveyor systems are to be run.
 Best points available for loading.
 Size of material to be handled.
 Ore crushing and sorting machinery:
 Coal—
 Capacity.
 Screening sizes.
 Motive power.

Ore crushing and sorting machinery—
 Continued.
 Mixers—
 Capacity.
 Type of ore or coal.
 Size to be handled.
 Motive power.
 Ore—
 Capacity.
 Screening sizes.
 Kind of ore.
 Motive power.
 Rock—
 Capacity.
 Screening sizes.
 Kind of rock.
 Motive power.
 Salt—
 Capacity.
 Screening sizes.
 Kind of salt.
 Motive power.
 Screens—
 Type (revolving, vibrating, etc.).
 Type of material.
 Capacity.
 Size of screening.
 Width.
 Length of travel.
 Motive power.
 Separators—
 Capacity.
 Screening size.
 Type of material.
 Motive power.
 Stamp mills—
 Type of ore.
 Kind of ore.
 Capacity.
 Size of stampings.
 Motive power.
 Amalgamation, flotation, and other concentrating machinery:
 Capacity.
 Type of material.
 Size of material to be handled (in rough, in finish).
 Motive power.
 Smelting and roasting machinery:
 Capacity.
 Type of ore to be handled.
 Size of ore.
 Heating equipment to be used.
 Other mining and quarrying machinery:
 Kind and type of equipment desired.
 Capacity.
 Type of material for which to be used.
 Stone-working machinery:
 Kind.
 Capacity.
 Type of work for which it is to be used.
 Channeling machines—
 Capacity.
 Size of material to be handled.
 Kind of material.
 Motive power.

Stone-working machinery—Con.
 Cleaning machines—
 Capacity.
 Size of material to be handled.
 Kind of material.
 Motive power.
 Crushers—
 Capacity.
 Size of rough.
 Size of finish.
 Motive power.
 Lathes—
 Work to be done.
 Kind of material.
 Swing.
 Distance between centers.
 Polishing machines—
 Capacity.
 Size of material to be handled.
 Vertical or horizontal spindle.
 Whether all dry polishing.
 Type of material to be polished.
 Saw machinery—
 Capacity.
 Type of material to be sawn.
 Size of saw.
 Type of drive.
 Surfacing machines—
 Size of bed.
 Capacity of machines.
 Type of material.
 Drive.
 Well machinery (general, excluding oil-well):
 Drilling—
 Size of drill.
 Depth to be drilled.
 Kind of soil.
 Motive power.
 Other well machinery (general, excluding oil-well)—
 Type and kind.
 Capacity.
 Dimensions.
 Oil-well machinery:
 Oil-well drilling apparatus—
 Size of drill.
 Depth to be drilled.
 Kind of soil.
 Motive power.
 Other oil-well and oil-handling machinery and equipment (special valves, stills, pumps, etc.)—
 Capacity.
 Inlets and outlets.
 Distance of piping.
 Type of oil to be handled.
 Surrounding conditions.
 Oil-refinery equipment:
 Capacity of equipment desired.
 Kind of process to be used.
 Daily supply of crudes.
 Oil-storage systems:
 Capacity of storage tanks.
 Amount of supply of oil.
 Distance to be piped.

Wax-refining equipment:
 Capacity of plant.
 Supply of oil.
 Type and kind.
 Centrifugal pumps:
 Capacity.
 Inlet.
 Outlet.
 Type of drive.
 Reciprocating-steam pumps:
 Capacity.
 Steam pressure.
 Inlet and outlet sizes.
 Other power pumps:
 Capacity.
 Type—
 Acid.
 Bilge.
 Dredging.
 Air lift.
 Boiler feed.
 Brine.
 Hydraulic.
 Marine.
 Vacuum.
 Purpose for which pump is to be used.
 Inlet.
 Outlet.
 Depth to be pumped.
 Type of drive.
 Pump accessories:
 State exactly the part required, and if to replace the broken part of some pump now in operation, the serial number of pump, the manufacturer's name, and a complete description of the part required.
 Hydraulic rams:
 Size.
 Working pressure.
 Inlet and outlet sizes.
 Length of ram.

METAL-WORKING MACHINERY

Lathes:
 Type—
 Automatic.
 Axle.
 Bench.
 Bevel.
 Gear turning.
 Bobbin.
 Brass turning.
 Brass finishing.
 Buffing.
 Brass forming.
 Chucking.
 Crankshaft.
 Engine.
 Foot power.
 Cap.
 Gun.
 Precision.
 Projectile.
 Pulley.

Lathes—Continued.

- Type—Continued.
 - Roll.
 - Screw cutting.
 - Shafting.
 - Toolroom.
 - Turret, etc.
- Swing.
- Length of bed (distance between centers).
- For special lathes, type of work.
- Type of drive.

Boring machines:

- Type—
 - Vertical.
 - Horizontal.
 - Special.
- Size.
- Size of table.
- Height of work.
- Width of work.
- On horizontal type, length of travel of spindle.

Drilling machines:

- Type—
 - Vertical.
 - Horizontal.
 - Radial.
 - Wall, etc.
- Number of spindles—Single, multiple.
- Type of drilling head—Plain, universal.
- Drilling range (size of taper shank).
- Drive.

Planers:

- Type—Single head, open side, etc.
- Size of bed.
- Travel.
- Type of drive.

Shapers:

- Type—
 - Single.
 - Double.
 - Draw cut.
 - Vertical, etc.
- Size of table.
- Length of stroke.
- Type of drive.

Slotters.

- Size of slot.
- Size of table.
- Length of stroke.
- Type of drive.

Bending machinery.

- Capacity.
- Type, such as pipe, plate, tire, etc.
- Thickness of material.
- Width of material.
- Type of drive.

Power presses.

- Type—
 - Drawing.
 - Forming.

Power presses—Continued.

- Type—Continued.
 - Riveting.
 - Pipe.
 - Plate.
 - Sheet metal.
 - Stamping.
 - Tire, etc.
- Size of work.
- Thickness of material.
- For drawing, depth of work.
- Drive.

Gear cutters.

- Type of machine—Hobber, cutter, etc.
- Kind of gears.
- Size of gears.
- Drive.

Rolling mills.

- Capacity.
- Type of material.
- Width of material.
- Gage.

Motive power or drive.

- Milling machines.
 - Type—
 - Horizontal.
 - Universal.
 - Vertical.
 - Briggs, etc.

- Size of table.
- Type of work.
- Table travel.
- Drive.

Sharpening and grinding machines:

- Type—
 - Bench.
 - Floor.
 - Cylindrical.
 - Emery wheel.
 - Surface.
 - Tool cutting.
- Sharpening.
 - External.
 - Internal.
- Honing, etc.
- Size of work.
- Kind of work.
- Travel of wheel or table.
- Drive.

Thread-cutting and screw machines:

- Type—
 - Bar.
 - Chucking.
 - Full automatic, etc.
- Size of work (diameter).
- Length of work.
- Number of pieces per hour.
- Drawing of piece.
- Drive.

Punches:

- Size.
- Kind of material.
- Gage.
- Drive.

Power hammers:

- Type—
 - Drop.
 - Hydraulic.
 - Steam.
 - Board or rope lift, etc.
- Size of work.
- Capacity.

Chucks:

- Type—
 - Three or four jaws.
 - Centering.
 - Drill.
- Lathe, etc.; give the capacity of the chuck and the number of jaws and, if possible, an idea of the shape of the material to be used for cutters, dies, drills, reamers, taps, the size of same and the shank or cutter hole and other parts, such as lathe, tools, etc.; give the size, size of the tool holder, and any other information available.
- Diameter or size of work.
- Size of spindle.
- Size of chuck.

Machine-tool parts:

- Kind of part.
- Machine on which it is to operate, (serial number and size of machine).

Pneumatic portable tools:

- Type—
 - Riveters.
 - Hammers.
 - Drills.
 - Road-surfacing equipment.
 - Tampers.
- Length of hose line.
- Types of attachments or tools required with the equipment.

Foundry and molding equipment:

- Type—Molders, shakers, mixers, etc.
- Capacity.
- Type of material to be used.
- Type of work to be done.

Die-casting machinery:

- Capacity of machine.
- Type of dies.
- Material.

Depth of dies.

Other metal-working machinery and parts:

- Arsenal equipment—
 - Complete information with regard to the types of machinery desired or else the type of equipment to be manufactured.
 - The number of guns, revolvers, etc., to be turned out per day.
 - In case machinery is not specifically described with full dimensions, blue prints showing the equipment should be sent.

Other metal-working machinery and parts—Continued.

- Broaching machinery—
 - Capacity.
 - Kind of broach to be made.
 - Size.
 - Type of drive.
- Bulldozers—
 - Capacity.
 - Whether it is hot or cold work.
 - Size of material.
 - Type handled.
 - Length of material.
 - Type of drive.
- Wire, rod, tube drawing machinery—
 - Kind of machinery desired.
 - Capacity.
 - Kind of wire, rod, or tubing to be manufactured, together with the thickness or gage.
 - Kind of material.
 - Type of drive.
- Wire-weaving equipment—
 - Capacity of equipment.
 - Width of weaving to be done.
 - Number of wires to be woven.
 - Gage.
 - Type of design required.
 - Type of drive.
- Miscellaneous wire machinery, including wire-spring making—
 - Capacity of equipment.
 - Exactly the type of work to be done.
 - Drawings and specifications.
 - Gage of wire to be handled.
 - Type of wire.
- Metal-container machinery—
 - Capacity.
 - Type of container.
 - Gage.
 - Dimensions of container, especially the depth, if 1-piece drawing.
 - Type of drive.
 - Type of material.
- Can machinery—
 - Capacity.
 - Type of cans to be manufactured.
 - Gage of material.
 - Diameter.
 - Depth.
 - Type of top required.
 - Type of drive.
 - Type of material.
- Tub and pail machinery—
 - Capacity.
 - Dimensions of tub or pail.
 - Drawing showing same.
 - One piece or seamed.
 - Gage of material.
 - Type of material.
 - Type of drive.

- Other metal-working machinery and parts—Continued.
- Metal-drum machinery—
Capacity.
Dimensions of metal drum.
Drawing showing same.
One piece or seamed.
Gage of material.
Type of material.
Type of drive.
- Chain-making machinery—
Capacity.
Type of chain.
Material.
Dimensions of links.
Are links to be welded?
Thickness of material to be worked.
Type of drive.
- Corrugating machines—
Capacity.
Type of material.
Gage.
Number of corrugations per inch.
Type of drive.
- Seaming machines—
Capacity of machines.
Type of seam.
Gage of material to be handled.
Dimensions of pieces to be worked.
Kind of material.
Type of drive.
- Die-sinking machines—
Capacity.
Type of die.
Material to be used.
Dimensions of die to be worked.
Type of drive.
- Filing-room equipment—
Type of saws to be handled.
Gage.
Number of teeth per inch.
Hand or automatic filing.
- Flanging machines—
Capacity.
Type of flange.
Material.
Width of flanges.
Thickness of material to be worked.
Type of drive.
- Forging equipment—
Capacity.
Material to be hot or cold.
Kind of material to be handled.
Dimensions of material.
Shape of forging.
Type of drive.
- Stamping machines—
Capacity.
Kind of material.
Gage.
Width of material.
Length of material.
Size of stamping operation.
If possible, blue prints of stamping to be done.
Type of drive.
- Other metal-working machinery and parts—Continued.
- Galvanizing and tinning machinery—
Kind of material.
Gage of material to be worked.
- Key-seating machinery—
Capacity.
Type of material to be worked.
Size of key seat.
Type of drive.
- Shearing and trimming machinery—
Capacity.
Gage.
Kind of material.
Width of material.
Special shapes, if any.
Type of drive.
- Tack and nail making machinery—
Capacity of equipment.
Size and type of tacks or nails.
Material.
Type of drive.
- Polishing and burnishing machinery—
Capacity of equipment.
Type of polishing and burnishing.
Size of material to be worked.
Type of drive.
- Spring-making machinery (leaf)—
Capacity of equipment.
Gage of metal.
Dimensions of spring leaves.
Type of spring.
- Steel-plant equipment—
Capacity.
Type of steel, whether to be worked hot or cold.
Thickness and kind of material to be turned out.
Width of material.
If special shapes, send dimensions, sheets, and plates for same.
Type of drive.
- Tamping machines—
Work for which to be used.
Kind of material on which to be used.
Type of drive.
- Welding machinery—
Kind of welding to be done, such as lap weld, seam weld, butt weld, etc.
Thickness of material.
- Forge—
Capacity.
Kind of forge.
Type of blower.
Type of drive for blower.
- Oxy-acetylene welding and cutting equipment—
Capacity of equipment.
Type of material to be worked.
Thickness of material.
Type of torches desired.

- Other metal-working machinery and parts—Continued.
- Acetylene gas generator equipment—
Capacity.
Full information as regards the necessary ingredients for the manufacture of the gas; whether they are procurable locally or will have to be imported.
- Wire-rope making machinery—
Capacity.
Type of wire to be used.
Gage of wire.
Number of strands per rope.
Type of drive.
- Pipe-thread cutting machinery—
Capacity.
Type of pipe.
Size of pipe.
Type of thread.
Number of threads per inch.
Type of drive.
- TEXTILE MACHINERY
- Cotton-carding machines:
Capacity.
Length of staple.
Number of cards.
Type of drive.
- Cotton twisting and spinning machines:
Capacity.
Number of spindles.
Number of threads to be spun.
Type of drive.
- Cotton looms:
Capacity.
Width of weaving.
Number of threads per inch.
Type of design.
Type of drive.
- Other cotton machinery:
Type of equipment desired.
Kind of equipment desired.
Work to be done.
How the equipment will be fitted in with the other equipment.
- Wool picking and carding machinery:
Capacity.
Length of staple.
Number of cards.
Type of drive.
- Wool spinning and weaving machinery:
Number of spindles.
Capacity.
Number of threads to be spun at one time.
- Wool weaving machinery:
Capacity.
Width of material.
Number of threads per inch.
Type of design.
Type of drive.
- Wool-finishing machinery (including napping and shearing):
Capacity.
Width of material.
Kind of work to be done.
- Silk machinery:
Capacity.
Equipment for rayon or silk goods.
Whether to be for finishing process or to be worked from the bale to the finished material.
Width of material.
Number of threads to be woven.
- Rayon manufacturing equipment:
Type and kind of material from which the rayon is to be manufactured.
Is process to be started from the ground up?
Available supply of material to be used in manufacturing.
Capacity of plant.
Type of products to be manufactured.
- Fiber machinery (textile):
Type of fiber.
Capacity of equipment.
Purpose for which equipment is to be used.
- Fiber treating and extracting machinery:
Type of fiber.
Capacity of machine.
Length of staple of fiber.
Purpose for which fiber is to be used after being worked.
- Fiber-weaving machinery:
Capacity of machine.
Width of weave.
Number of threads per inch.
Type of drive.
- Fiber rope and twine making machinery:
Length of staple.
Number of threads for rope (for twine).
Type of drive.
Diameter of rope or twine.
- Knitting machinery:
Capacity.
Type of equipment, such as circular, full-fashioned, etc.
Type of knitting to be done—
Wool.
Cotton.
Silk.
Rayon.
Kind of work to be turned out.
Number of threads per inch.
- Carpet and rug making machinery:
Capacity.
Type of material.
Information with regard to design.
Width of rugs or carpets.
Type of rug or carpet.
Number of threads per inch.
Type of drive.
- Bleaching machinery:
Capacity.
Type of bleaching to be done.
Process desired.

Braiding and insulating machinery:

Capacity.
Type of braiding and insulating.
Number of threads per inch.
Type of design desired.

Calenders:

Capacity.
Type of material to be handled.
Width of rolls.

Cloth-bag making machinery:

Capacity.
Size of bags.
Kind of material.

Dyeing equipment:

Capacity.
Type of machines.
Process to be used.
Kind of dyes.

Embroidering machinery:

Capacity of equipment.
Width of work.
Design.
Type of material.

Lace-making machinery:

Capacity of equipment.
Width of work.
Design.
Type of material.

Winding machinery:

Number of spindles.
Number of threads.
Kind of material.

Cloth-cutting machinery:

Capacity.
Type of material to be cut; if special design, advise also width and thickness of material.

Hair picking and carding machinery:

Capacity.
Number of cards.
Type of drive.

Asbestos-working machinery:

Capacity.
Kind of work to be done.
Thickness.
Width of material.
Whether board or block.

Sewing machines:

Capacity of machine.
Type of stitch.
Kind of material to be sewn.
Width of material.

Other textile machinery, n. e. s.:

Capacity of machinery.
Where equipment is to be used.
Kind of equipment required.
Purpose for which to be used.
Kind of material on which it is to work.

OTHER MACHINERY

Shoe machinery:

Whether for repair or new work.
Kind required, such as—
Polishers.
Buffers.
Cutters.
Grinders.

Sewing machines, etc.

Kind of shoes to be manufactured.
Type of drive.
Capacity of machinery.

Baker's machinery:

Capacity.
Type and kind of equipment desired, such as mixers, ovens, sifters, etc.
Type of drive.

Cornucopia making machinery:

Capacity.
Dimensions of cornucopias.
Type of drive.

Special baker's machinery:

Capacity of equipment.
Type of equipment.
Purpose for which it is to be used.

Confectioner's machinery:

Capacity.
Type of confectionery.
Material.

Type of drive.

Weighing machinery:

Capacity.
Purpose, such as—
Conveyances.

Grain.

Metals.

Minerals.

Liquids, etc.

If for flour, state so; also give dimensions of platform desired.

Packaging machines:

Capacity of machine.
Type—
Bag filling.
Box filling.
Can filling.
Bottle filling.

Type of material to be packed.

Size of container to be filled.

Weight of material to be placed in container.

Closing machines:

Capacity.

Type—

Corking machines.

Sealing machines.

Wrapping machines.

Typing machines.

Nailing machines.

Type of package to be wrapped.

Labeling machines:

Capacity of machines.
Size of labels.
Size of container on which to be placed.

Bottle-washing machinery:

Capacity of machine.
Type of bottle.
Give specific information as to size

of bottle, such as—
Diameter at bottom.

Diameter of opening at top.

Length of neck.

Total depth of bottle.

Mills, ore-handling:

Capacity of mill.
Type of mill, such as—
Attrition and single disk mills (ore).

Ball.

Hammer.

Roller.

Tube.

Tumbling, etc.

Type of material.

Size of material, rough and finished.

Type of drive.

Flour-mill and gristmill machinery:

Capacity.
General information as to the type of equipment desired. If a whole plant, full information in regard to the supply of material and the desired number of barrels or bags per day.

Buhr mills:

Capacity.
Kind of material to be run through.
Size of finished material.

Type of drive.

Cleaners:

Capacity.
Type of material.
Size of screening.

Dryers:

Capacity.
Heat supply.
Type of heat.

Type of drive.

Type of material to be dried.

Grain-elevator machinery:

Capacity.
Height of elevator.
If any special conveying equipment desired, specify.

Give desired number of bushels per day to be delivered.

Storage space desired.

If any limitations as to height or other dimensions, give these.

Mixers:

Capacity.
Purpose for which they are to be used.
Type of drive.

Polishers:

Capacity.
Type of material.
Type of drive.

Rolls:

Capacity.
Diameter and length of rolls desired.
Type of drive.

Attrition and single-disk mills (grain):

Capacity.
Kind of grain.
Size of finished product.
Type of drive.

Rice-mill machinery:

Capacity.
Specific information with regard to quantity and quality of rice, full data pertaining to its consistency, and how much polishing it will require.

Sugar-mill machinery:

Capacity of plant.
Specific type of machinery, such as—
Cane and bagasse conveyors.

Centrifugals.
Other sugar-mill machinery.

Full data should be supplied in each case as to whether cane or beet sugar is to be produced, the amount of the finished product desired, if by-products are to be used, etc.

Furnaces and ovens (except electrical):

Capacity.
Type, such as—
Annealing and tempering.

Benzol recovery plants.

By-product coke ovens.

Blast.

Core.

Cupola.

Enameling.

Japanning.

Incinerators.

Laboratory.

Reheating.

Open hearth.

Smoke consumers.

Sulphur, etc.

Type of heat.

Type of products.

Size of product.

Size of floor space available.

Packing machinery:

Type of machinery desired.

Capacity of equipment.

Kind of product to be handled.

Fruit-handling equipment (except graders):

Capacity of equipment.

Kind of fruit.

Size of fruit.

Full information as to the purpose for which equipment is to be used.

Fruit graders (for large fruit, such as citrus):

Capacity.

Kind of fruit.

Sirup kettles:

Capacity.

Kind of sirup.

Amount of finished product desired.

Sirup furnaces:

Capacity.

Kind of sirup.

Amount of finished product desired.

Meat-packing machinery:

Capacity of equipment.

If complete plant, advise the kind of meat to be handled.

Number of animals per day.

If by-products are to be used, state so and give purpose for which by-products will be utilized.

If for slaughter house and packing, state the type of machinery, such as—

Cutters.

Mixers.

Dryers.

Scrapers.

Slicers.

Stuffers, etc.

Canning machinery:

Capacity of plant.

Type of material to be canned, whether meat (kind) or fruit (kind).

Do they manufacture own cans and is the can-making machinery to be supplied? If so, give full information with regard to the material to be used for making the cans.

Chemical-plant equipment:

Type of equipment desired, such as—

Condensers—Ammonia, barometric, jet, surface, etc.

Centrifugals.

Crystallizers.

Defecators.

Dehydrators.

Digesters.

Evaporators—Crystallizing, high density, multiple, etc.

Driers.

Extractors.

Filters—Air oil, water, etc.

Humidifiers.

Kettles.

Mixers.

Nitators.

Pulverizers.

Receivers.

Reducers.

Retorts.

Still—Acid, ammonia, alcohol, gasoline, tar, water.

Sulphonators, etc.

Purpose for which equipment is to be used.

Capacity per day.

Size of present plant.

Equipment in present plant.

Floor space available.

Cement-plant equipment:

Kind of machinery required, such as—

Grinders.

Crushers.

Mixers.

Furnaces.

Conveyors.

Capacity of equipment.

Type of drive.

Pulp and paper machinery:

Type of mill—

Pulp.

Paper.

Corrugated paper.

Corrugated paper box.

For pulp mill, kind of wood to be used.

For paper mill, wood pulp, rags, linen, newsprint, etc.

Capacity of equipment.

Type of drive.

Tobacco machinery:

Type of equipment—

Preparing machinery—Driers, conveyors, mixers, cutters, etc.

Packaging machinery—For loose or plug cut tobacco, for cigars or for cigarettes.

Capacity of equipment.

If to supplement present equipment, specify present plant equipment.

Clay-working machinery:

Type of equipment, such as—

Clay.

Pottery.

Brick.

Tile.

Concrete pipe.

Capacity.

Type of drive.

Coffee-mill machinery:

Type of equipment, such as—

Cleaners.

Shellers.

Sorters.

Mixers.

Grinders.

Roasters.

Capacity.

Sawmill machinery:

Type of equipment, such as—

Band saws.

Resaws.

Edgers.

Swing saws.

Niggers.

Conveyors.

Log carriages.

Sorting machinery.

Tying machinery.

Jacks.

Log runways.

Sawmill machinery—Continued.

Capacity.

Kind of timber.

Size of timber (diameter and length, maximum and minimum).

Size of finished stock.

Drive.

Logging machinery:

Type—

Portable mills.

Stump pullers.

Logging hoists and derricks.

Jacks.

Peaveys.

Cant hooks.

Pilers, etc.

Capacity.

Woodworking machinery:

Type—

Saws—swing, veneer, edge, band, circular, rip, crosscut, etc.

Boring and drilling machines—horizontal or vertical, single or multiple spindle, universal head.

Planers.

Planers and matchers, three and four side.

Lathes.

Sanders—plain, drum, 2, 3, 4, or 6 roll, belt, special, etc.

Jointers, single side or two side.

Mortisers.

Dowel machines.

Moulders—1, 2, or 3 side.

Tenoners—single or double end.

Surfacers, single side or two side.

Kilns, size and type.

Cooperage machinery—Saws, stove machines, benders, etc.

Excelsior pickers.

Hogs.

Match machinery.

Toothpick machinery.

Floor-surfacing equipment.

Veneer machinery—Lathes, jointers, edgers, tapers, etc.

Capacity.

Size of stock to be worked (rough).

Size of finished stock.

Blowers and ventilating machinery:

Type—

Centrifugal.

High speed.

Low speed.

Forge.

Dust collectors.

Air-conditioning equipment.

Diagram of building (if possible) giving—

Complete dimensions.

Work required.

Number of people.

Machines and locations.

Inlets and outlets.

Pipe sizes, etc.

Glass machinery:

Type—

Plate.

Window.

Insulator.

Bottle, etc.

Material.

Capacity.

Kind of machines—

Mixers.

Blowers.

Molds.

Furnaces, etc.

Paint machinery:

Type—

Stills.

Vats.

Mixers.

Grinders, etc.

Capacity.

Kind of paint.

Painting and paint-spraying machinery:

Capacity.

Type of equipment.

Air pressure of compressor for spraying equipment.

Work on which it is to be used.

Kind of paint.

Brewers' machinery:

Type—

Vats.

Stills.

Kettles.

Dryers, etc.

Capacity.

Article to be manufactured.

Rubber mill machinery:

Type—

Calenders.

Crackers.

Devulcanizers.

Dryers.

Grinders.

Mixers.

Molds.

Presses.

Reclaimers.

Refiners.

Rolls.

Separators.

Slitters.

Stretchers.

Spreaders.

Tire-factory equipment.

Washers.

Vulcanizers, etc.

Capacity.

Size of work, maximum and minimum.

Soap-making machinery:

Capacity.

Type of soap—

Vegetable oil.

Animal oil.

Dye, etc.

Form of soap (cake, flake, etc.).

- Garbage and sewage disposal equipment:
 Capacity per day.
 Water supply available.
 This machinery is highly specialized; give all information possible.
- Waterworks equipment:
 Type—
 Filters.
 Pumps.
 Chlorinators.
 Softening equipment, etc.
 Capacity (quantity of water used per day), maximum and minimum.
 Kind of water (chemical analysis should be submitted).
 Distance to be pumped.
 Pressure desired.
- Refrigerating and ice-making equipment:
 Type—
 Compressors—Ammonia, CO₂, brine, etc.
 Coolers—Brine, chemical, oil, etc.
 Ice cutters.
 Capacity.
 Size of storage space to be cooled or quantity of ice to be manufactured per 24 hours.
 Dimensions.
- Ice-cream machinery.
 Capacity.
 Molded or loose.
 Kind of materials to be used.
- Gas-plant equipment:
 Kind of gas.
 Capacity required.
 Pressure.
 Inlet and outlet sizes.
 Distance to be transmitted.
- Oil-mill machinery:
 Type (presses, centrifugals, etc.).
 Capacity per day.
 Kind of oil to be extracted (cottonseed, olive, etc.).
- Fire engines, hand and horse drawn, including factory equipment:
 Size of pump.
 Size of outlet.
 Pressure.
 Distance to be pumped.
- Air compressors:
 Type—
 Single.
 Duplex.
 Tandem.
 Capacity.
 Pressure.
 Storage cylinder size.
 Inlet size.
 Outlet size.
- Laundry machinery (industrial):
 Type—
 Washers.
 Dryers.
 Presses.
 Dry cleaners, etc.
 Size.
 Power (gas, steam, or electric).
- Meters:
 Type—
 Air.
 Coal.
 Feed water.
 Flow.
 Frequency.
 Gas.
 Gasoline.
 Oil.
 Steam.
 Water (house or industrial), etc.
 Size of inlet.
 Size of outlet.
 Dial readings.
- Ball and roller bearings and parts:
 Diameter of balls or rollers.
 Length of rollers.
 Inside diameter of races.
 Outside diameter of races.
 Number to be manufactured per day.
- Briquetting machines:
 Type of material (coke, wood, nutshells, etc.).
 Capacity.
 Size of briquettes.
- Brush and broom making machinery:
 Type of brush or broom with dimensions.
 Capacity.
 Material.
- Button-making machinery:
 Type of button.
 Material.
 Capacity.
- Celluloid-making machinery:
 Capacity.
 Kind of forms to be made.
- Cordage and net making machinery:
 Thickness of rope or net.
 Capacity.
 On nets, width of weave.
- Gears:
 Type—
 Spur.
 Bevel.
 Plain.
 Marine reverse.
 Turbine reduction, etc.
 Pitch.
 Number of teeth.
 Material.
- Hatters' machinery:
 Material and type of hat.
 Type of equipment (steam vats, blockers, etc.).
- Industrial locomotives:
 Type—
 Gasoline.
 Steam.
 Diesel.
 Compressed air, etc.
 Gauge of track.
 Horsepower required.
- Leather-working and tanning machinery:
 Kind of skins.
 Type of work.

- Leather-working and tanning machinery—Continued.
 Type of equipment (tanning, finishing).
 Capacity.
- Lime making and hydrating machinery:
 Capacity.
 Kinds of equipment.
- Linoleum manufacturing machinery:
 Capacity.
 Thickness of material.
- Lubricating equipment:
 Type.
 Size.
- Marine machinery and equipment:
 Type—
 Capstans.
 Bitts.
 Winches.
 Steam steering engines, etc.
 Capacity.
- Drying machinery:
 Type of drying.
 Capacity.
- Pharmaceutical machinery:
 Type—
 Pill.
 Powder.
 Liquid.
 Material to be used.
 Capacity.
- Carbonating machines and CO₂ generators:
 Capacity.
- Presses:
 Type—
 Baling.
 Hydraulic.
- Presses—Continued.
 Type—Continued.
 Cotton.
 Paper.
 Tobacco.
 Hops, etc.
 Capacity.
- Testing and balancing machinery:
 Type of work.
 Capacity of machine.
- Molding equipment:
 Type of equipment (candle, sealing wax, etc.).
 Capacity.
- Fumigating and sterilizing equipment:
 Purpose—
 Ships.
 Hospitals.
 Buildings, etc.
 Material to be used.
- Sand-blast equipment; tumbling barrels and sand-preparing equipment:
 Types of equipment.
 Capacity.
- Cotton gins:
 Capacity.
 Length of staple.
- Mine cars:
 Capacity.
 Gauge.
- Sprinkler systems:
 Type of system.
 Diagrams of building in which to be installed.
 Full information as to height, width, and lengths of building, number of floors, etc.

A World Trade Directory report should accompany every trade opportunity submitted unless such report has been submitted within a reasonably recent time.

MINERALS

Request for products falling within the jurisdiction of the mineral and metals section should be specific. Numerous trade opportunities are received covering the agency or purchase of minerals, metals, nonferrous metals, building materials, etc. These terms are too general and the trade opportunity is of little value as a result.

Our field men should insist, before preparing trade opportunities in their behalf, that prospective customers should describe in feasible detail each of the commodities in which they are interested. For example, the broad classification "Base metals" is insufficient. To be of real value the opportunity must be more precise and the particular base metal or metals desired named (copper, lead, zinc, etc.) and the form in which required mentioned (ingots, rod, plate, sheet, etc.). Similarly, trade opportunities for the purchase of scrap metal should mention the type of scrap; that is: (1) Copper, brass, and bronze, and other copper alloys; (2) aluminum and alloys; or (3) lead and alloys.

Likewise, in the case of building materials, this description is much too generic to be of use. Mention specifically the article or articles being sought, whether Portland cement, finishing cement, tile (wall, floor, or roofing), composition roofing, etc.

Trade opportunities are frequently received for the purchase of "mineral oils," "lubricants," "greases," "oil fuels," "wax," "bitumens," etc. Such brief reports are practically worthless to our exporters. It is often necessary to cable back for more details. World petroleum markets are highly competitive, and it is absolutely necessary that the specifications of the oil products desired be received simultaneously with the trade opportunity. We can not expect our exporters to quote prices to possible purchasers if we do not furnish them with the following essential facts:

1. The purpose for which the material is to be used; for example, aviation gasoline, gear-case oil, paving asphalt, etc.
2. The quality of the oils desired (see table of specifications below).
3. The quantity of the oils desired.
4. The method of packing and shipping the goods (whether in 4-liter tins, 50-gallon drums, by tanker, etc.).

SPECIFICATIONS FOR PETROLEUM PRODUCTS

Gasoline: Gravity and distillation range (particularly the end point).

Kerosene: Gravity, color, flash point, and burning test.

Lubricating oils: Gravity, viscosity, flash point, color, and pour point.

Fuel and gas oils: Gravity, viscosity, flash point, and sulphur content.

Greases: Color, hardness, soap content, and filler.

Paraffin wax, refined or unrefined: Melting point, color, and purity.

Asphalt (bitumens): Softening point, penetration, and ductility.

Crude petroleum: Gravity and type (according to source).

Gravity may be Baumé, specific, or American Petroleum Institute.

COAL

Coal should be specified as gas, coking, or high and low volatile steam coal and whether through and through or screened.

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MOTION PICTURES

ENTERTAINMENT MOTION PICTURES

This includes motion pictures for entertainment use in motion-picture theaters.

Trade opportunities for motion pictures should not be submitted where American distributing concerns maintain a branch office. The same applies to territories that are already being supplied by some immediate branch of an American distributor as there is no opportunity of any individual securing an agency where American branch offices of any American company are already supplying the market. Be sure to indicate whether inquirer is agent, dealer, or exhibitor, and whether prospective agent desires outright purchase or country rights.

EQUIPMENT AND ACCESSORIES

This group includes motion-picture projectors, professional and amateur screens, generators, sound apparatus, mirror-reflector and high and low intensity arc lamps, stereopticons, studio equipment, and allied equipment necessary in the projection of motion pictures.

The successful sale of this class of equipment depends upon the service organization of the agent and the following details are very much desired.

In submitting trade opportunities for particular motion-picture equipment it is very necessary that some sort of specification or description be furnished indicating the kind, type, size, prices, discounts, etc.

1. What arrangements has the prospective agent for display purposes?
2. What is his selling organization?
3. Is he prepared to carry at his own expense a stock of repair parts and maintain the necessary service organization to repair or service any equipment he may sell?
4. Is an exclusive agency desired?
5. What territories will be covered?
6. How long has prospective agent been established?
7. Does he handle competitive equipment of foreign makes?

INDUSTRIAL AND EDUCATIONAL FILMS

In forwarding opportunities for industrial and educational motion pictures, the following should be stated:

1. Name and address of person, concern, or association requesting use of film.
2. Purpose for which film is to be used.
3. What are the subjects requested?
4. Will the above concern pay transportation to destination and return?
5. As near as you can determine, about what rental fee will the above concern pay?
6. How long is it intended to use the picture?

MOTION PICTURES

7. Will pictures require a translation of titles? In what language? Who will pay the expense of titling? Would pictures be titled in the United States or by user?

8. What size film is desired, 16 millimeters, 28 millimeters, or 35 millimeters?

9. Is nonflammable stock required?

10. Can you roughly estimate the probable attendance during its use?

11. Where is this picture to be shown (theaters, schools, etc.)?

12. Are there any special import provisions on pictures of this type in your territory?

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PAPER

The paper industry is rather highly specialized, mills generally limiting their output to a very few lines. For this reason it is necessary in trade opportunities to specify in detail the exact article desired in order that proper and efficient service may be given our manufacturers. Asking for "paper" is highly unsatisfactory because the term may include anything from a tissue or high-grade writing to a straw paper or asbestos-filled sheet used for an entirely different purpose and made by unallied groups in the industry, probably in different parts of the country. This fact needs special emphasis in connection with our trade-opportunity service. Samples are also in order where these are available.

The following will indicate the details of classification of the commodities handled by the paper division:

1. Paper base stocks:
 - Pulpwood, rough, peeled, and rossed.
 - Rags, waste bags, gunny, old rope, etc.
 - Grasses, waste paper, clippings, etc.
2. Wood pulp:
 - Mechanical groundwood, bleached and unbleached.
 - Chemical cellulose—
 - Sulphite bleached, easy bleaching, news grade, strong, and mitscherlich.
 - Sulphate, bleached and unbleached (kraft).
 - Soda, bleached and unbleached.
 - Rag, straw, esparto, and other pulps.
3. Paper:
 - Printing, including newsprint and uncoated book.
 - Grease-proof and waterproof, including parchment, waxed, glassine, etc.
 - Wrapping, including kraft, manila, jute, sulphite, and decorated or printed.
 - Writing, including letter and note, either ruled, printed, or decorated; drawing paper, bond, ledger, boxed paperies, etc.
 - Surface coated, including metal or gelatin covered.
 - Tissue, including stereotype mat, condenser, Bible, India, carbon stock, etc.
 - Crêpe.
 - Board, including pulpboard in rolls, leather board, test or container board, wall board, insulating board, and press board.
 - Cigarette paper.
 - Hanging and wall paper.
 - Other paper products, including bags, envelopes, blotting paper, vulcanized fiber, gummed transfer, reinforced, lined, decalcomania, mulch, and other papers.
4. Machinery:
 - Paper converting, including envelope making, box and carton making, folding, feeding, stitching, gathering, winding, slitting, cutting, ruling, punching, binding, twisting, lining, and similar machinery.
 - Printing machinery and equipment, including presses, stereotype and electrotype machinery and supplies, sheet-metal printing and lithographing machinery.
5. Supplies and accessories for printing and engraving:
 - Printing, lithographing and engraving inks, varnishes, and colors; type metal, types, engravers' tools and supplies, plates, cuts, bookbinders' supplies, composing-room equipment, etc.

The preceding brief outline will indicate the reason for being as definite and specific in stating an inquirer's needs as may be possible. The use of such terms as "stationery," "articles sold in stationery stores," "paper goods," and so on will probably result in failure to publish or distribute a trade opportunity because these are meaningless to the manufacturer and distributor. In specifying an inquirer's wants, furnish always size, color, finish, weight, and grade in the case of paper, and for machinery, every pertinent detail available as to size, purpose, and distinguishing peculiarities that can be furnished.

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RAILWAY LOCOMOTIVES, CARS, AND EQUIPMENT

In forwarding trade opportunities for railway locomotives, cars, and equipment, consideration must first be given to the manner in which this equipment is to be purchased. Generally speaking, if the railways are Government owned and operated, tenders are solicited on specifications prepared by Government engineers. In such cases always state where these specifications can be obtained, their cost, and whether it is necessary for the prospective tenderer to have his name included on an approved list of manufacturers maintained by the railways before he can submit bids.

If an approved list is maintained, advice should be given concerning the procedure which must be followed to fulfill this condition. If solicitations are received only through agents located in the country, this should be indicated. As much time as possible should be allowed American manufacturers to tender bids, and if the time is short a brief notice of the trade opportunity should be cabled.

Trade opportunities involving industrial railways or railways owned and operated by individual companies should indicate the general purchasing methods followed. Frequently the nationality of the railway controls such purchases, and public solicitation of tenders is usually not requested.

In certain instances some railway equipment is purchased locally through stocks maintained by agents. Mention should be made of these purchases (not in the form of a trade opportunity) so that American manufacturers may be enabled better to prepare for similar business in the future.

Trade opportunities serve a double purpose: First, as a prospective sale for American equipment, and second, as a check by the American manufacturer on his foreign agents. The latter is almost as important as the former.

Opportunities for sale of certain types of railway equipment frequently follow other railway-equipment sales in foreign countries. American manufacturers of specialized equipment may have opportunity to interest foreign firms or railways in installing patented equipment if it can be known here who are successful bidders for certain railway-equipment orders.

Notices of all railway construction programs are extremely important. Such construction or development programs obviously afford not only the opportunity for later sale of railway and probably considerable other equipment which may be purchased from the United States, but also opportunity for American manufacturers to know considerably in advance what may be expected from a prospective market. They can lay plans for bidding, and personally arrange their sales programs.

Where public tenders are solicited, notices of the tender with specifications, if possible, should be included with the trade opportunity.

Detailed data should be provided sufficient for a manufacturer to have full information on which to base his tender, not only where public bids are called for, but also relative to individual or industrial carrier purchases.

Naturally, a brief summary of railway-equipment trade reports can not but indicate the information needed generally when such opportunities are reported. For locomotives and cars, the following general outline should be followed:

- Name and address of company.
- Gauge of track and weight of rail in pounds per yard.
- Height from top of rail to center of coupling in inches, and type of coupler.
- Is grade in favor of or against load?
- Steepest upgrade for loaded cars, per cent and length.
- Steepest upgrade for empty cars, per cent and length.
- Steepest downgrade for loaded cars, per cent and length.
- Can run be made for grade? If so, how long?
- Must train be started on grade? Give radius of sharpest curve in feet.
- If curves occur on grades, what is radius and grade in combination?
- If for subterranean service, state ventilating conditions and, if possible, the number of cubic feet of free air per minute.
- Altitude (if over 1,000 feet above sea level).
- Detailed specifications of locomotives and cars, track layout and profile, if possible.

For parts and general equipment, the above outline of information is unnecessary, but drawings and specifications should be forwarded.

A World Trade Directory report should accompany every trade opportunity submitted unless such report has been submitted within a reasonably recent time.

RUBBER PRODUCTS

In making requests for rubber goods, the description should be stated as specifically as possible, and the following classification is suggested:

Automobile casings and inner tubes.	Rubber corsets and dress shields.
Solid tires for trucks.	Rubber toys or toy balloons.
Tire repair materials.	Rubber thread for use in manufacture of elastic fabrics.
Bicycle or motor-cycle tires.	Rubber cement.
Rubber boots.	Reclaimed rubber.
Rubber overshoes, rubbers, etc.	Scrap rubber.
Canvas rubber-soled shoes.	Rubber friction or insulating tape.
Rubber heels or rubber soles.	Hard-rubber specialties—combs, etc.
Rubber transmission or conveyor belt- ing.	Hard rubber sheets, rods, or tubes.
Rubber hose—garden, fire, pneumatic, etc.	Rubber-proofed clothing, raincoats, etc.
Rubber-packing, washers, valves, etc.	Rubberized piece goods, cotton or silk, for manufacture of raincoats, etc.
Water bottles, fountain syringes, nip- ples, rubber gloves, or other druggists' rubber goods.	Rubber-coated auto cloth.
Erasers, rubber bands, or rubber stamps.	Hospital sheeting, rubberized.
Baby pants, bibs, or aprons, pure gum or rubberized fabric.	

A World Trade Directory report should accompany every trade opportunity submitted unless such report has been submitted within a reasonably recent time.

SHOES AND LEATHER MANUFACTURES

Whenever trade opportunities are sent in for shoes the class should be stated, as men's, women's, or children's; whether high or low cut; also whether Goodyear welt, McKay sewn, or turn.

In making inquiry for other leather goods the definite term for the goods should at all times be used; that is, a full description of the commodities desired, whether suitcases, traveling bags, pocketbooks, purses, novelties, etc. As a rule, the terms "leather goods," "shoe findings," or "shoe polishes" are of very little value to the American merchant.

Shoe findings.—Specify the particular kinds of findings desired, whether counters, heels, eyelets, threads, welting, nails, etc.

Shoe polishes.—Specify whether paste or liquid and full particulars regarding the sizes of containers.

Furthermore, specify in all cases the price that the foreign merchant is willing to pay for the goods.

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SPECIALTIES

The commodities represented by the specialties division are included in the following representative groups:

- Office appliances and supplies (except paper stationery).
- Business equipment in general (except safes and vaults).
- Furniture of all kinds.
- Glass and pottery products (except plumbers' sanitary ware).
- Jewelers' ware (including clocks and watches, time recorders, etc.).
- Photographic and optical goods.
- Professional and scientific instruments (including hospital and laboratory equipment, etc.).
- Musical instruments and supplies.
- Toys and games and athletic and sporting goods (including sporting arms and ammunition and amusement devices, but excluding athletic clothing and shoes).
- Printed matter (including maps, charts, lithographed material, etc.).
- Miscellaneous commodities, such as novelties and notions, soda fountains, brushes, sponges, cork manufactures, buttons, sewing machines, and nonelectrical labor-saving devices.

When submitting trade opportunities on specialty products it is very important that the kind of goods desired be clearly described. It is well to consider the trade opportunities from the reader's point of view. Such general terms as "household goods," "business equipment," etc., should be avoided. In cases where the prospective purchaser or agent is interested in a more or less complete line of household goods some indication should be given as to just what particular types he is interested in, outlining in some general way the line of goods he desires to obtain. If possible, the quality desired and the approximate price range should be given, together with any other details which would be of help in bringing such an opportunity to the attention of American firms who will be best able to meet the requirements. Where the description of the goods is very general and the terms used are very broad, no response is probable, and it is difficult to do justice to the opportunity. After some such cases have been handled it has been found later that the firms which might have been most vitally interested were not reached. Lack of proper description and detail in connection with specialty trade opportunities has been responsible for many of them coming under the "No results" column.

Many trade opportunities specify "office appliances." Although this is a very well-recognized term, it embraces such a large variety of machines of different kinds that it would be well, wherever possible, to describe the types in which the prospective customer is particularly interested.

There are very few firms who are in a position to take an agency for "all kinds" of office appliances or who are prepared to make actual purchases throughout such a wide field. In those cases where a firm wants to hear from manufacturers of all types and kinds of office appliances for the purpose of selecting some new or untried line, or with a view of forming new connections in an old field, some indication of the firm's desire should be given. This enables the

division to give a much more intelligent and efficient distribution. The manufacturer is less disposed to respond to an inquiry which is broad in scope than to one which makes it clear that his product is the subject of interest.

As stated above, the office-appliance field, although all-embracing, is a comparatively easy one to handle, but it is not so true of such groups as the professional and scientific instruments group, which includes a wide range of unallied products. In such cases no effort should be spared to give adequate details. This also holds true for musical instruments and many other groups which contain a variety of unrelated products, some of which would find no market whatever abroad.

Another point to be kept in mind is the fact that a large number of so-called specialties are handled by many other commodity divisions. For instance, rubber specialties come under the rubber division; leather-goods specialties under the boot and shoe division; athletic clothing and other textile specialties under the textile division; electrical specialties under the electrical division. It is, therefore, important that when using the word "specialties" a full and complete description should be given of the kinds and types.

Trade opportunities which call for "specialties of all kinds" simply can not produce the desired results.

When mentioning such lines as jewelry it would be very helpful and much appreciated by the trade if some indication could be given of the kind of jewelry desired; whether cheap or high-priced jewelry and whether it includes silverware or other jewelers' wares. We often receive opportunities calling for "furniture of all kinds." It should be borne in mind that furniture includes household, office, church, school, theater, hospital, hotel, etc., and that under each one of these headings there are a large number of varied lines and types which might not be of any interest whatever to a foreign firm.

In the specialties field it is found that much time, effort, and money is wasted in useless correspondence between the foreign prospect and the interested American firm in clarifying many details which might easily have been covered in the original trade opportunity.

There are any number of examples which could be given along this line, but it is felt that the above general outline will be sufficient to show the details which should be included in submitting trade opportunities coming under the various commodity groups handled by the specialties division.

A World Trade Directory report should accompany every trade opportunity submitted unless such report has been submitted within a reasonably recent time.

TEXTILES

Under the term "textiles" are included raw fibers, such as cotton, wool, silk, flax, hemp, jute, manila hemp, and sisal, whether intended for yarn, fabrics, or cordage; synthetic fibers, such as rayon; yarns manufactured from the various fibers; fabrics, woven or knitted; garments and other articles manufactured from cloth or yarn.

It is not possible to give all the details that must be specified in a transaction for the various kinds of textiles, but the following will serve as an example of the factors that must be taken into consideration.

Raw cotton, cotton linters, and cotton waste.—The main factors in raw cotton are grade and staple. By grade is meant the degree of cleanliness, quality of ginning, and color; and it is expressed in terms which are practically universal. The principal grades are as follows: Middling fair, strict good middling, good middling, strict middling, middling, strict low middling, low middling, strict good ordinary, and good ordinary. The basic grade is middling, the highest is middling fair, and the lowest is good ordinary. The staple of the cotton is the length, which is usually expressed in inches and fractions of an inch.

Cotton linters are the short fibers which are removed from the ginned cottonseed in the cottonseed oil mills. In cotton linters the factors to be taken into consideration are likewise the length, the amount of foreign matter, and coloring. Standards for cotton linters have been established by the United States Department of Agriculture in about the same manner as lint cotton. The principal seven grades are as follows: No. 1 (fancy first cut), No. 2 (good first cut), No. 3 (good mill run), No. 4 (average mill run), No. 5 (low mill run, choice second cut), No. 6 (mattress second cut), and No. 7 (rayon and paper, second cut).

Cotton waste comes in various kinds and grades. In general, cotton waste is divided into two principal large classes, hard waste and soft waste, the former consisting of waste resulting during the spinning and the subsequent processes, and the latter consisting of waste obtained in the preparatory processes, such as carding, etc. Waste is also spoken of as combing waste; that is, waste secured in the combing process and card waste or waste produced in the carding process. Some wastes are used for respinning, while others are used mainly for machinery wiping and are called wiping waste.

Yarn.—Cotton yarns are used for a great variety of purposes, such as weaving, knitting, sewing, braiding, wrapping, etc. They are usually spoken of in terms of counts or sizes, quality or grade, and twist or turns per inch. A count means the size of the thread and is based on the number of hanks of 840 yards each that are required to weigh 1 pound. For example, a 20's yarn means that 20 hanks of 840 yards each will weigh 1 pound. Yarn may be a single thread or of a multiple form composed of a number of single threads twisted into one.

It will be of great assistance to the American exporter to know whether the yarn is single or ply; the size or count; the general quality

or grade; the form of put-up and packing required; that is, if the yarn is to be wound on cones, tubes, or cops or reeled into skeins; also, whether it is to be bleached, dyed, mercerized, printed, polished, or in the gray; the size and weight of the individual package and the method of tying or wrapping it, and the size and weight of the bundle, bale, or packing case.

Cotton cloths.—Cotton fabrics are described in various ways. In general, it involves four principal factors—the type or kind of cloth, the width, the construction, and the weight. The type is described by the general name, such as sheeting, drill, print cloth, duck, etc. The width is expressed in inches. The thread construction means the number of ends of warp and filling threads per square inch, and the weight is expressed either in ounces per linear yard or yards per pound. For example, 37" sheeting, 48 x 48, 4.00, means a sheeting 37 inches in width, 48 warp ends and 48 filling ends per square inch, weighing 4 yards to the pound. In cotton cloth, as in cotton yarn, it must be stated whether it is gray, bleached, dyed, printed, mercerized, or finished in any other manner. It should also be stated whether the goods are desired in cases or bales as well as the desired method of folding the goods in packing.

Silk and rayon.—In submitting trade opportunities on silk and rayon fabrics, describe as accurately as possible the type of fabric desired (plain weave, print, crêpe, chiffon, velvet, etc.), indicating, where possible, use to which fabric is to be put (dress goods, draperies, shoe satins, etc.). In rayon yarns, indicate process (whether viscose, cellulose-acetate, cuprammonium, or nitrocellulose), also deniers desired and put-up, such as skeins, cones, cops, etc.

In clothing trade opportunities, it is important that the following be stated clearly: (1) Exact garment (do not report "haberdashery"), (2) material to be in garment (cotton, silk, etc.), (3) quality desired—(best, medium, cheap), (4) colors wanted, (5) style or type of garment (in overalls, for example, whether over-all, cover-all, apron-type), (6) any special refinements desired by the potential buyer. Trade opportunities for branded American lines will be sent promptly to the proper manufacturer.

Knit goods.—In the case of knit goods it should be stated whether hosiery, underwear, or outerwear is required. It must be known whether the commodity is to be of silk, cotton, wool, rayon, or mixtures thereof, and, if mixtures, what proportion of each fiber. A description of sizes, weight, and quality will be of assistance. State whether the goods are to be put in cardboard boxes or wrapped in paper before packing. State if underwear is to be union suits or 2-piece garments; give sleeve and leg lengths, quality or price range, sizes, and colors.

Furs.—In filling out trade opportunities for furs, care should be taken to give the exact name of the pelt. For instance, a name such as Hudson seal should not be used, as the National Association of the Fur Industry and the Federal Trade Commission recently decided that the real name of the pelt should be in the name. The fur formerly called Hudson seal, therefore, would be seal-dyed muskrat. This would apply to dressed and dyed furs and fur garments.

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